

**MITIGATION MONITORING AND REPORTING PROGRAM**

**GUADALUPE MINES LANDFILL  
CREEK BANK STABILIZATION  
File No. PDA93-018-02**

**CITY OF SAN JOSÉ  
NOVEMBER 2012**

## PREFACE

Section 21081.6 of the California Environmental Quality Act (CEQA) requires a Lead Agency to adopt a Mitigation Monitoring and Reporting Program whenever it approves a project for which measures have been required to mitigate or avoid significant effects on the environment. The purpose of the monitoring and reporting program is to ensure compliance with the mitigation measures during project implementation.

In order to avoid or significantly reduce significant environmental impacts of the project to a less than significant level so that a Mitigated Negative Declaration may be adopted, the applicant must agree to revise the project to include the mitigation measures contained herein before a proposed Mitigated Negative Declaration and initial study are released for public review in accordance with the California Environmental Quality Act Guidelines 15070 (b)(1).

I, \_\_\_\_\_, the applicant, on the behalf of \_\_\_\_\_, hereby agree to fully implement the Mitigation Measures described below which have been developed in conjunction with the preparation of an initial study and Mitigated Negative Declaration for my proposed project. I understand that these Mitigation Measures or substantially similar measures will be adopted as conditions of approval with my development permit request to avoid or significantly reduce potential environmental impacts to a less than significant level.

This Mitigation Monitoring and Reporting Program addresses those measures in terms of how and when they will be implemented.

Applicant's Signature \_\_\_\_\_

Date \_\_\_\_\_

Environmental Impacts	Mitigation Measures	Responsibility for Monitoring Compliance	Method of Monitoring Compliance	Timing of Compliance
<b>Biological Resources</b>				
Impact BIO-1: Construction activities could impact special status species.	<p>MM BIO-1.1: An employee education program shall be conducted prior to the initiation of project activities. The program will consist of a brief presentation by persons knowledgeable in federally-listed and state special status species biology and legislative protection to explain concerns to contractors and their employees. The program shall include: a) a description of the special-status species occurring or potentially occurring on the site; b) information on status of protected species and protection under state and federal laws; and c) a list of measures required during the project to reduce impacts to natural communities and special-status species. Crews shall be instructed what to do if an animal is found, including notifying the project foreman and the City of San Jose immediately. City of San Jose staff shall notify the appropriate wildlife agency. Educational materials will also provide information on protecting the creeks and wetlands from construction damage.</p> <p>MM BIO-1.2: The biological monitor shall coordinate with the contractor to conduct pre-construction surveys for CRF, FYF and WPT immediately before initiation of any ground disturbing activities in each area. These surveys will comprise walking transects while conducting visual encounter surveys within areas that will be subject to vegetation clearing, grubbing, grading, cut and fill, or other ground disturbing activities.</p> <p>MM BIO-1.3: A qualified biologist shall be present during all grubbing and vegetation clearing activities that may affect CRF, FYF or SFDW. If at any point CRF, FYF, SFDW or any other listed species is discovered during these activities, all work will cease and the appropriate wildlife agency shall be contacted to determine how to proceed.</p> <p>MM BIO-1.4: To prevent inadvertent entrapment of animals during construction, all excavated, steep-walled holes or trenches more than 2</p>	Director of Planning, Building & Code Enforcement	<p>The Project Proponent shall provide signed electronic copies (pdf) of the biological survey and the habitat mitigation plan for review by and to the satisfaction of the Director of Planning, Building &amp; Code Enforcement.</p> <p>All measures shall be printed on all construction documents, contracts, and project plans.</p>	Prior to issuance of a grading permit.

	<p>feet deep shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled they must be thoroughly inspected for trapped animals. Any pipes or similar structures stored in the project site overnight shall be inspected before they are subsequently moved, capped and/or buried. If at any time a listed species is discovered, the on-site biological monitor shall be immediately informed. The on-site biological monitor shall determine if relocating the species is necessary and shall work with USFWS and CDFG prior to handling or relocating unless otherwise authorized.</p> <p>MM BIO-1.5: To prevent animals from becoming entangled, trapped or injured, erosion control materials that contain synthetic mono-filament netting shall not be used within the project area. This includes products that use photodegradable or biodegradable synthetic netting, which can take several months to decompose. Acceptable materials include natural fibers such as jute, coconut (coir), twine or other similar fibers.</p> <p>MM BIO-1.6: Surveys for roosting bats shall be conducted by a qualified biologist no more than thirty (30) days prior to any building demolition or removal, construction activities or Oak tree relocation and/or removal. If a female or maternity colony of bats is found on the project site, and the project can be constructed without disturbance to the roosting colony, a bat biologist shall designate buffer zones (both physical and temporal) as necessary to ensure the continued success of the colony. Buffer zones may include a 200-foot buffer zone from the roost and/or timing of the construction activities outside the maternity roosting season (after July 31 and before March 1). If an active nursery roost is known to occur on the site and the project cannot be conducted outside of the maternity roosting season, bats may be excluded after July 31 and before March 1 to prevent the formation of maternity colonies. Such exclusion shall occur under the direction of a bat biologist, by sealing openings and providing bats with one-way exclusion doors. In order to avoid excluding all potential maternity roosting habitat simultaneously, alternative roosting habitat, as determined by the bat biologist, should be in place at least one summer season prior to the exclusion. Adjacent oaks and oak woodland areas should be preserved to the maximum extent feasible as potential bat roosting habitat. Bat roosts should be monitored as determined necessary by a qualified bat biologist, and the removal or displacement of bats shall be performed in conformance with the requirements of the CDFG.</p> <p>MM BIO-1.7: Not more than thirty (30) days before initial ground</p>			
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	<p>disturbance on the project site, a qualified biologist shall conduct a survey of the project site for any existing woodrat houses. If any woodrat houses are found within the project site, they shall be removed according to the following procedures. Prior to any disturbance of the woodrat house, logs and branches should be placed under the canopies of trees near, but outside of, the project site. Next, all understory vegetation shall be cleared within the project site or in the area immediately surrounding the houses (but the house itself should not be removed at this stage). After all cover (except the houses themselves) has been removed, each active house shall be disturbed (by a qualified wildlife biologist) to the degree that woodrats leave the nest and seek refuge elsewhere. The house sticks shall be removed from the project site and piled at the base of newly placed logs and branches outside the project site. Potential health hazards to persons moving nests should be addressed to minimize risk of contracting diseases associated with woodrats and woodrat houses. This mitigation measure shall be performed under the direct supervision of a biologist approved for this project by the CDFG.</p>			
Impact BIO-2: If construction takes place during the bird nesting season (February 1 through August 31), construction could impact nesting birds protected under the MBTA.	MM BIO-2.1: If feasible, vegetation removal shall be scheduled outside of the nesting season for raptors and other birds protected by the MBTA, such that vegetation removal occurs only from October 1 through December 31. If this is not possible, pre-construction surveys for nesting raptors and other birds shall be conducted by a qualified ornithologist to identify active nests that may be disturbed during project implementation. Between January and April (inclusive) pre-construction surveys shall be conducted no more than 14 days prior to the initiation of construction activities or tree removal. Between May and August (inclusive), pre-construction surveys shall be conducted no more than thirty (30) days prior to the initiation of these activities. The surveying ornithologist shall inspect all trees in and immediately adjacent to the construction area for nests. If an active nest is found in or close enough to the construction area to be disturbed by these activities, the ornithologist, shall, in consultation with the State of California, Department of Fish & Game (CDFG), designate a construction-free buffer zone (typically 250 feet for raptors and 50 feet for other birds) around the nest.	Director of Planning, Building & Code Enforcement	<p>The Project Proponent shall provide signed electronic copies (pdf) of the biological survey and the habitat mitigation plan for review by and to the satisfaction of the Director of Planning, Building &amp; Code Enforcement.</p> <p>All measures shall be printed on all construction documents, contracts, and project plans.</p>	Prior to issuance of a grading permit.
Impact BIO-3: The proposed project would result in the removal of riparian vegetation and two trees, including one western black willow and one coast live oak in the riparian corridor along	MM BIO-3.1: Consistent with routine agency guidelines, the western black willow and the coast live oak to be removed by the project shall be replaced in kind at a 3:1 ratio in the project vicinity. The minimum size of each replacement tree will be a 24-inch box. Replacement trees shall be in good health and should be from local stock if feasible. All replacement trees shall be watered for at least one year after planting at least twice monthly during the dry season, after the soil is dry to the	Director of Planning, Building & Code Enforcement	The Project Proponent shall provide signed electronic copies (pdf) of the tree protection and replacement plan for review by and to the satisfaction of the	Prior to issuance of a grading permit.

<p>Guadalupe Creek. These trees are protected by the City's Tree Protection Ordinance (Municipal Code Section 13.32). The project could also indirectly result in the death of additional trees due to trimming or grading in the root zone. The roots or branches of native riparian trees could be impacted during construction.</p>	<p>touch 3 inches below grade. Replacement trees shall be monitored and shall be re-planted if they die. Tree replacement shall comply with City of San Jose regulations and with permit requirements from the California Department of Fish and Game and the Regional Water Quality Control Board.</p> <p>If the trees that have to be trimmed die, or grading occurs within the drip line and the tree dies, the tree shall be replaced in kind at a 3:1 ratio in the project area with a minimum 24-inch box size.</p> <p>To provide plant diversity and include existing species in and adjacent to the riparian zone, the proposed hydroseed mix shall also include mugwort (<i>Artemisia douglasiana</i>), California figwort (<i>Scrophularia californica</i>; also known as California bee plant), coyote brush (<i>Baccharis pilularis</i>), California sage (<i>Artemisia californica</i>), and buckwheat (<i>Eriogonum fasciculatum</i>) (2 lbs/ac).</p> <p>Willow poles shall be installed on the top of bank in each graded area, so that at least three willow poles are planted in each area. Willow poles are woody plant cuttings, capable of rooting, that are taken from trees and shrubs. All plant materials must be top quality stock, and it is desirable that the poles be taken from willows in the vicinity, including the willow that would be removed as part of this project if it is healthy and has sufficient pole material. This will ensure that the plant materials are true to species. The trees from which these three poles will be cut shall be sound, healthy specimens. Plant materials that have serious injuries, insect pests, diseases or are shriveled, will be rejected. Willow poles shall be cut using a sharp tool. Live willow poles shall be from 5 to 8 ft in length with a basal end of 0.5 to 1.5 in. in diameter. The top ends shall be blunt; butt ends shall be angled at 45 degrees. The poles shall be stripped of all stems and leaves, taking care to minimize scarring or bruising. Immediately upon cutting, willow poles will be placed in water in a shaded area and shall be installed as soon as possible. If the installation is to be longer than 2 weeks, the poles can be planted in 15-gallon containers with at least 12 inches of soil cover.</p> <p>The revegetation efforts shall be monitored for five years, and the monitoring shall be documented in an annual report. The performance standard is to achieve a minimum of 1:1 replacement of trees removed by the project by year 5, and a minimum 80 percent cover in the hydroseeded areas by year 2. Replanting shall occur as required to meet the performance standard. The planted areas shall be weeded of noxious invasive plant species, including primarily non-native thistles, broom</p>		<p>Director of Planning, Building &amp; Code Enforcement.</p> <p>All measures shall be printed on all construction documents, contracts, and project plans.</p>	
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species, and eucalyptus until vegetation is well established in the planted areas. Monitoring tasks and schedule are summarized in the following table.

**Monitoring Tasks, Schedule and Performance Standards**

<b>Element</b>	<b>Monitoring or Maintenance Task</b>	<b>Task Schedule for Five Year Monitoring</b>	<b>Performance Standard</b>
Tree mortality	Visually observe each tree or pole that is planted to ensure it is still alive; weed areas around tree to promote survival.	Observe and weed monthly for the first three months after planting, then observe twice per year	Minimum 1:1 replacement of trees removed by the project by year 5
Plant cover	Visually observe hydroseeded areas to ensure a diversity of species are established, and invasive thistles, broom and eucalyptus are not present.	Monthly for the first three months after planting, then twice per year	Minimum 80% cover after 2 years
Invasive weed control	Remove non-native thistle, broom species and eucalyptus	Monthly for the first three months after	Less than 1% cover of invasive thistle, broom or

			from planted areas.	planting, then twice per year	eucalyptus in hydroseeded areas			
		Remediation	Replace dead and/or dying vegetation if survivorship of original plantings falls below 80%.	Fall	See above			
	<p>MM BIO-3.2: The following tree protection measures shall be included in the project in order to protect trees to be retained during construction and comply with City of San Jose guidelines:</p> <ul style="list-style-type: none"> <li>• Damage to any tree during construction shall be reported to the City's Environmental Principal Planner, and GRDC contractors shall treat the tree for damage in the manner specified by the Environmental Principal Planner.</li> <li>• No construction equipment, vehicles or materials shall be stored, parked or standing within the tree dripline; and</li> <li>• Cutting and filling around the base of trees shall be done only after consultation with the city arborist and then only to the extent authorized by the city arborist; and</li> <li>• No waste construction materials or wastewater shall be dumped on the ground between the dripline and the base of the tree or uphill from any tree where certain substances might reach the roots through a leaching process; and</li> <li>• Barricades shall be constructed around the trunks of trees as specified by a qualified arborist so as to prevent injury to trees making them susceptible to disease causing organisms; and</li> <li>• Wherever cuts are made in the ground near the roots of trees, appropriate measures shall be taken to prevent exposed soil from drying out and causing damage to tree roots.</li> </ul>							
Impact CULT-1: The proposed project could adversely impact historical loci and features identified in the archaeological survey conducted for the project area (Holman & Associates,	MM CULT-1.1: GRDC shall retain a qualified historical archaeologist to depict cultural features and loci identified in the archaeological survey (Holman & Associates, 2011) on the project plans. The historical archaeologist shall also flag a ten foot buffer around all cultural features and loci that could be potentially impacted by the project. Project construction shall avoid the flagged cultural resources to the extent feasible. If construction work would occur within ten feet of any					Director of Planning, Building & Code Enforcement	The Project Proponent shall provide signed electronic copies (pdf) of the historical archaeologist's survey and the cultural resources mitigation plan for review	Prior to issuance of a grading permit.

2011).	recorded features or loci, a historical archaeologist shall conduct a more detailed recording and historical research to evaluate the affected features or loci eligibility for listing on either California Register of Historical Resources or the National Register of Historic Places. If features or loci are not eligible, avoidance is not necessary. If features or loci are eligible, they shall be avoided or adverse affects shall be mitigated. New Almaden County Park expressed an interest in accepting buildings, structures, or objects that might need to be removed.		by and to the satisfaction of the Director of Planning, Building & Code Enforcement.  All measures shall be printed on all construction documents, contracts, and project plans.	
Impact HAZ-1: Release of mercury or naturally-occurring asbestos during grading in areas containing serpentine rock, potentially affecting Guadalupe Creek or site workers.	<p>MM HAZ-1.1: Excavation and grading shall avoid serpentine when feasible. If serpentine must be graded, the top 2 feet of soil shall be replaced with clean soil, so as to avoid impacts from naturally occurring asbestos (NOA). Soils potentially contaminated with mercury or containing NOA shall be removed and disposed of at an appropriate facility, to the satisfaction of the Director of Public Works. Dust shall be suppressed during grading, and a dust control plan to minimize exposure to mercury and NOA (per the Bay Area Air Quality Management District regulations) shall be submitted to the Environmental Services Department.</p> <p>MM HAZ-1.2: A worker safety and health program, as required by Cal OSHA will be implemented during soil removal, transport, and consolidation. The worker safety and health program will:</p> <ul style="list-style-type: none"> <li>• Minimize human contact with contaminated soils, inhalation of dust, and contact with ground or surface water.</li> <li>• Inform Guadalupe Landfill employees and visitors of the relevant aspects of the safety and health program.</li> <li>• Require the responsible contractor to monitor and enforce compliance.</li> <li>• Require visitors and other non-essential personnel to stay a distance adequate to ensure their safety. The site will be open only to workers and individuals required to undertake or inspect work.</li> </ul>	Director of Planning, Building & Code Enforcement	<p>The Project Proponent shall provide signed electronic copies (pdf) of the hazardous materials and dust control plan for review by and to the satisfaction of the Director of Planning, Building &amp; Code Enforcement.</p> <p>All measures shall be printed on all construction documents, contracts, and project plans.</p>	Prior to issuance of a grading permit.



## INITIAL STUDY

### PROJECT FILE NO.:

PDA93-018-02

### PROJECT DESCRIPTION:

The Guadalupe Rubbish Disposal Company, Inc. (GRDC) proposes to stabilize creek bank slopes in five areas along an approximately half mile stretch of Guadalupe Creek. The project is located on the Guadalupe Landfill property in southwestern San Jose (Figures 1 and 2). The five areas include Area 2, Area 4, Area 6, Area 9 and Area 10 (Figure 3, and photographs are provided in Appendix A). In addition, the Pond D embankment and a drainage ditch discharging into Pond D would be repaired. The proposed area of ground disturbance in these five areas, as well as construction staging areas and access routes, constitute the project site (Figure 3). The project site and surrounding area constitute the project area. In general, the proposed project would include grading of over-steepened slopes to reduce erosion potential, improve bank stability, and accommodate revegetation. Work would be confined to the creek banks and adjacent upland areas, and no work would occur in the creekbed or below the ordinary high water mark (OHWM).

A Work Plan for Stormwater Best Management Practices (BMPs) was prepared for the GRDF in response to Regional Water Quality Control Board (RWQCB) staff concerns over eroding banks along Guadalupe Creek (Stantec Consulting Corporation, 2009). The work plan outlined proposed BMPs for 10 specific areas of concern mapped along the banks of Guadalupe Creek on the GRDF property. Several of the areas were stabilized and partially restored through a program of hand grooming, soil amendment, seeding, planting, and placement of temporary erosion and sedimentation controls (Areas 1, 3, 5, 7 and 8). These areas are identified as Phase 1 sites in the work plan. BMP implementation at the Phase 1 sites was completed in October 2009 and post-construction monitoring is ongoing. The remaining areas (Areas 2, 4, 6, 9 and 10) were designated as Phase 2 sites and require grading, drainage improvements, and erosion control measures including revegetation to stabilize the slopes. In October 2010, interim soil stabilization measures were implemented at the Phase 2 sites, and the measures have been monitored and maintained since then. Interim soil stabilization measures include soil amendment, hand contouring, native seed mixtures, staked erosion control blankets, silt fencing, fiber rolls and sand bags. Phase 2 sites constitute the proposed project and are described below from upstream to downstream.

### Existing Conditions and Proposed Treatments for Each Area

#### Pond D (Figure 4)

Pond D is an existing storm water retention pond located at the eastern project boundary upstream from Area 2. Work at Pond D would consist of minor grading to the northwestern embankment of the pond and repair of a drainage ditch to restore discharge into Pond D. The repair of the drainage ditch would eliminate concentrated run-off to Area 2.

#### Area 2 (Figure 5)

Area 2 is located adjacent to the creek approximately 200 feet west of Pond D. It is characterized by a steep, deeply eroded creek bank. Slope erosion was apparently caused by concentrated runoff flowing over the steep bank, resulting in over-steepened slopes up to 15 feet in height. The soil on the slope is exposed, apparently from active erosion and gravity failure which has denuded the slope of vegetation. Slope restoration at Area 2 would require grading the slope to an angle no steeper than 2:1 (2 horizontal to 1 vertical). The repair of the Pond D drainage ditch would eliminate concentrated run-off to Area 2.

Areas 4, 6, and 9 (Figures 6, 7 and 8)

Area 4 is located approximately 200 feet west of Area 2, Area 6 is located approximately 200 feet west of Area 4, and Area 9 is located approximately 300 feet northwest of Area 6. All of these areas are adjacent to Guadalupe Creek. These areas contain over-steepened slopes that are unstable and could continue to erode. These slopes require grading to produce a slope angle that allows for soil stabilization and revegetation. Slope restoration at Areas 4, 6 and 9, would require grading the slope to an angle no steeper than 2:1 (2 horizontal to 1 vertical).

Area 10 (Figure 9)

Area 10 is located near the old mine works approximately 900 feet west of Area 9, adjacent to Guadalupe Creek. Area 10 includes a large exposure of unvegetated fill material which has been partially eroded by surface water runoff from a former mining road. Prior to soil stabilization and revegetation, Area 10 requires soil grading and drainage improvements to reduce slope grade and direct runoff away from the eroding slope. Drainage improvements would include water bars on the former road upslope of Area 10.

**Grading, Excavation and Soil Stockpiling**

The project would require grading and excavation activities prior to soil stabilization and revegetation. The total cut volume and estimated area of ground disturbance are shown in Table 1 below. No grading is proposed at the staging areas.

**Table 1. Total Cut Volume and Estimated Area of Disturbance for Each Area**

Area	Total Cut Volume (cy)	Estimated Area of Disturbance (sq ft)	Estimated Area of Temporary Access Rd Disturbance (sq ft)	Total Disturbance (sq ft)	Total Disturbance (acres)
2	432	3,629	3,750	7,379	0.17
4	73	1,405	1,800	3,205	0.07
6	103	2,119	3,750	5,869	0.13
9	15	967	3,300	4,267	0.10
10	21	1,453	1,800	3,253	0.07
Pond D	0	3,000	1,700	1,700	0.04
Total	644	12,573	16,100	25,673	0.58

Standard construction equipment, such as excavators, frontend loaders, and dump trucks would be used during the grading activities. Photographs of typical equipment are attached as an appendix. Typically, the slopes would be graded using an excavator positioned at the top of the slope. The excavator would be used to stockpile the removed material in a location where a loader can be used to load dump trucks which would then either transport the excavated material to stockpiles located within the staging area, or transport the soil to the landfill to be used as cover. Alternatively, the excavator may be used to load soils directly into the loader or dump truck. Existing open (i.e., unvegetated) areas would be used to stockpile excavated material. No vegetation would be removed for the staging area or stockpiles. BMPs for erosion control would be used at the stockpiles to prevent the soils from migrating off-site. Standard BMPs for stockpile management (dust control, covering with tarps if necessary, fiber roll barrier to trap sediment runoff, and silt fencing), would be used to minimize erosion and dust.

**Tree Removal, Revegetation and Erosion Control**

An arborist surveyed the five areas of concern on May 12, 2011 (Barrie D. Coate and Associates, 2011) and recorded the diameter, height, spread and health of trees in and adjacent to proposed areas of ground disturbance. This inventory



included ten trees at Area 2, eight trees at Area 4, six trees at Area 6, seven trees at Area 9 and five trees at Area 10 for a total of thirty-six trees. Of these trees, two would be removed, nine would likely be impacted by trimming or grading near the roots, and twenty five are unlikely to be impacted. The trees that would be removed include a western black willow (*Salix lasiandra*) at Area 6 and a coast live oak at Area 10. Trees that could be subject to trimming or root damage include three valley oaks (*Quercus lobata*; one at Area 2 and two at Area 10), one big leaf maple (*Acer macrophyllum*) and one western black willow at Area 2, one white alder (*Alnus rhombifolia*) and two western sycamore (*Platanus racemosa*) at Area 4, and one coast live oak at Area 9 (Table 2).

All of the trees to be removed would be replaced with locally appropriate native tree species consistent with the City of San Jose Tree Ordinance (Municipal Code Section 13.32) and permits from the California Department of Fish and Game and the Regional Water Quality Control Board. Tree replacement would occur on the GRDF property. Slope revegetation would primarily consist of a native erosion-control seed mix that contains California brome (*Bromus carinatus*), tomcat clover (*Trifolium wildenovii*), and small fescue (*Vulpia microstachys*) (25 lbs/acre). Other species that may be used include arroyo lupine (*Lupinus succulentus*), yarrow (*Achillea millefolium*) (each 4 lbs/acre); California poppy (*Eschscholzia californica*) (3 lbs/acre); and California blue bell (*Phacelia campanularia*) (2 lbs/acre).

Planting would occur just before the beginning of the wet season to improve survivorship. Prior to planting, large rocks, sticks and other sharp objects would be removed and inorganic soils would be amended with mulch or organic topsoil. Seeding would be accomplished by hydroseeding or hand broadcasting. Fertilizer would be applied at the time of seeding. The seeded slope surfaces would be protected with straw-coconut fiber blankets or jute/coir matting, fiber rolls and silt fencing. Installation of an irrigation system is not proposed; hydroseeded areas typically do not require irrigation. If necessary, container plants would be watered manually from water transported into the area by water truck. Watering would occur as needed for up to a year after planting. Inspection of the revegetation would occur during and after major storm events and at the end of the rainy season to evaluate performance. Based on the results of these inspections, vegetation and other erosion control mechanisms would be maintained, repaired or replaced, as needed. Monitoring to assess survival rates of plants in revegetated areas would be ongoing for a period of at least 5 years.

**Table 2. Potential Impacts to Trees within Areas of Concern**

#	COMMON NAME	LATIN NAME	DIAMETER AT 4.5 FT. (INCHES)	HEIGHT (FEET)	SPREAD (FEET)	HEALTH*	POTENTIAL IMPACT
<b>Area 2</b>							
1	valley oak	<i>Quercus lobata</i>	16	25	25	1	No Impact
2	coast live oak	<i>Quercus agrifolia</i>	28 (diameter at 2 ft.)	40	45	1	No Impact
3	western black willow	<i>Salix lasiandra</i>	20	60	40	1	No Impact
4	white alder	<i>Alnus rhombifolia</i>	19	60	25	1	No Impact
5	big leaf maple	<i>Acer macrophyllum</i>	14	50	30	1	Potential Impact to roots or branches
6	western black willow	<i>Salix lasiandra</i>	18	60	10	1	No Impact
7	western black willow	<i>Salix lasiandra</i>	16	50	15	1	No Impact
8	western black willow	<i>Salix lasiandra</i>	16	50	25	1	Potential Impact to roots or branches
9	western black willow	<i>Salix lasiandra</i>	28	60	40	1	No Impact

#	COMMON NAME	LATIN NAME	DIAMETER AT 4.5 FT. (INCHES)	HEIGHT (FEET)	SPREAD (FEET)	HEALTH*	POTENTIAL IMPACT
10	valley oak	<i>Quercus lobata</i>	10	25	20	2	Potential Impact to roots or branches
<b>Area 4</b>							
1	white alder	<i>Alnus rhombifolia</i>	12	50	10	1	No Impact
2	white alder	<i>Alnus rhombifolia</i>	16	50	15	1	No Impact
3	white alder	<i>Alnus rhombifolia</i>	12	50	10	1	No Impact
4	white alder	<i>Alnus rhombifolia</i>	14	50	10	3	Potential Impact to roots or branches
5	western sycamore	<i>Platanus racemosa</i>	16	60	30	3	Potential Impact to roots or branches
6	western sycamore	<i>Platanus racemosa</i>	20			Dead	Potential Impact, but tree already dead
7	big leaf maple	<i>Acer macrophyllum</i>	16	20	25	1	No Impact
8	big leaf maple	<i>Acer macrophyllum</i>	18	40	30	1	No Impact
<b>Area 6</b>							
1	western black willow	<i>Salix lasiandra</i>	20	50	50	1	No Impact
2	western black willow	<i>Salix lasiandra</i>	12	15	12	1	No Impact
3	western sycamore	<i>Platanus racemosa</i>	20	50	20	3	No Impact
4	western black willow	<i>Salix lasiandra</i>	20	45	40	1	No Impact
5	western black willow	<i>Salix lasiandra</i>	14	45	25	1	No Impact
6	western black willow	<i>Salix lasiandra</i>	16	40	25	1	To be removed
<b>Area 9</b>							
1	blue elderberry	<i>Sambucus caerulea</i>	12	30	30	1	No Impact
2	coast live oak	<i>Quercus agrifolia</i>	16	20	15	4	Potential Impact to roots or branches
3	western black willow	<i>Salix lasiandra</i>	16	60	25	1	No Impact
4	white alder	<i>Alnus rhombifolia</i>	14	60	30	1	No Impact
5	white alder	<i>Alnus rhombifolia</i>	16	60	20	1	No Impact
6	white alder	<i>Alnus rhombifolia</i>	14	60	10	1	No Impact

#	COMMON NAME	LATIN NAME	DIAMETER AT 4.5 FT. (INCHES)	HEIGHT (FEET)	SPREAD (FEET)	HEALTH*	POTENTIAL IMPACT
7	western black willow	<i>Salix lasiandra</i>	14	40	20	1	No Impact
<b>Area 10</b>							
1	western sycamore	<i>Platanus racemosa</i>	14	45	12	1	No Impact
2	coast live oak	<i>Quercus agrifolia</i>	12	15	20	2	To be removed
3	valley oak	<i>Quercus lobata</i>	12	55	15	1	Potential Impact to roots or branches
4	coast live oak	<i>Quercus agrifolia</i>	20	15	35	2	No Impact
5	valley oak	<i>Quercus lobata</i>	20	40	40	2	Potential Impact to roots or branches

\*1=best, 5=worst

### Construction Staging Areas, Access Routes and Timing

One staging area would be established in an existing open work area on the property; no new areas would be cleared for project staging. The approximately 26,000 square-foot staging area would be at the roll-off bin storage area of the GRDF property (Figure 3). The staging area is of sufficient size to accommodate parking and a turn-around radius for construction equipment, storage of erosion control materials, portable toilets and stockpiles for excavated material.

Access roads for construction equipment and materials would be created, leading from the nearest staging area and existing road to each slope restoration site. In siting the access roads, the routes which represent the shortest distance and least steep approach have been selected (see Figure 3). The existing grass along the proposed access route would be cleared in a 20-foot wide swath to reduce fire hazard. The ground surface would be minimally graded to smooth out rough spots. The road surface would be watered to compact the disturbed soil and for dust control. Following completion of slope restoration, the access roads would be ripped or tilled to loosen the compacted soil, amended with organic material and fertilizer, as needed, and reseeded. Temporary erosion controls would be maintained until vegetation along the former access roads has become re-established. The amount of disturbance due to temporary access roads for each area is shown in Table 1.

Ground disturbing activities, such as excavation or grading, would occur between April 15 and October 15, and could last approximately three months. Erosion control measures, revegetation and monitoring activities would continue past the dry season.

### Permits Required

The work could require permits/authorizations from the following agencies:

- California Department of Fish and Game (CDFG): California Fish and Game Code Section 1600 Streambed Alteration Agreement (due to changes to the creek bank)
- Regional Water Quality Control Board: Clean Water Act 401 Water Quality Certification
- Santa Clara Valley Water District: Encroachment Permit
- City of San Jose: PD Permit amendment for the Guadalupe Disposal site to allow grading within 100 feet of the creek
- City of San Jose: Tree Removal Permit
- City of San Jose: Grading Permit

**LOCATION AND ASSESSOR'S PARCEL NUMBER(s):**

The proposed Guadalupe Creek bank stabilization project is located on the GRDF property in southwestern San Jose at the base of the Santa Cruz Mountains. The address is 15999 Guadalupe Mines Road, and the work would occur on APN 575-04-006 (Figures 1 and 2).

The project site is within the Los Gatos U.S. Geological Survey (USGS) 7.5 minute quadrangle, Township 8 South, Range 1 East. The GRDC owns the 411-acre property in San Jose, California. The property straddles the Capitancillos Ridge, and is adjacent to Almaden Quicksilver County Park. The property is bordered on the south and west by Guadalupe Creek, on the north by residential development on Guadalupe Mines Road and in the vicinity of Coleman and Camden Avenues, and on the east by Almaden Quicksilver County Park. Approximately 150 acres of the eastern and central portions of the property are occupied by a municipal landfill, recycling facilities, and a maintenance facility operated by GRDC; the remaining acreage is primarily open space. The southeastern portion of the property was historically mined for quicksilver, and contains the remnants of the Guadalupe Mercury Mine (Holman & Associates, 2011). The project site is within the Guadalupe River Watershed, which drains a 170 square mile area through San José, Los Gatos, Monte Sereno, Campbell, and Santa Clara (Schaaf & Wheeler Consulting Civil Engineers, 2009).

**EXISTING GENERAL PLAN DESIGNATION:**

Non-urban Hillside

**EXISTING ZONING:**

A(PD)

**EXISTING LAND USE:**

Landfill and accessory recycling, beneficial reuse, and diversion activities; Guadalupe Mines remediation and habitat restoration.

**SURROUNDING LAND USES / GENERAL PLAN / ZONING:**

	<b>Land Use</b>	<b>General Plan</b>	<b>Zoning</b>
North	Landfill and Residential	Low density, medium low density and medium density residential; private open space	A(PD), R-1-1, R-1-2
South	Open space and rural residential	Public park and open space; non-urban hillside	Public/quasi-public
East	Open space	Public park and open space; non-urban hillside	Public/quasi-public
West	Open space and rural residential	Outside of City; Regional Park (County)	Outside of City; HS-Hillsides (County)

**PROJECT APPLICANT'S NAME AND ADDRESS:**

Guadalupe Rubbish Disposal Company, Inc.  
15999 Guadalupe Mines Road  
San Jose, CA 95120

Contact: Bill Spence, (408) 268-1670 ext. 6311, wspence@wm.com

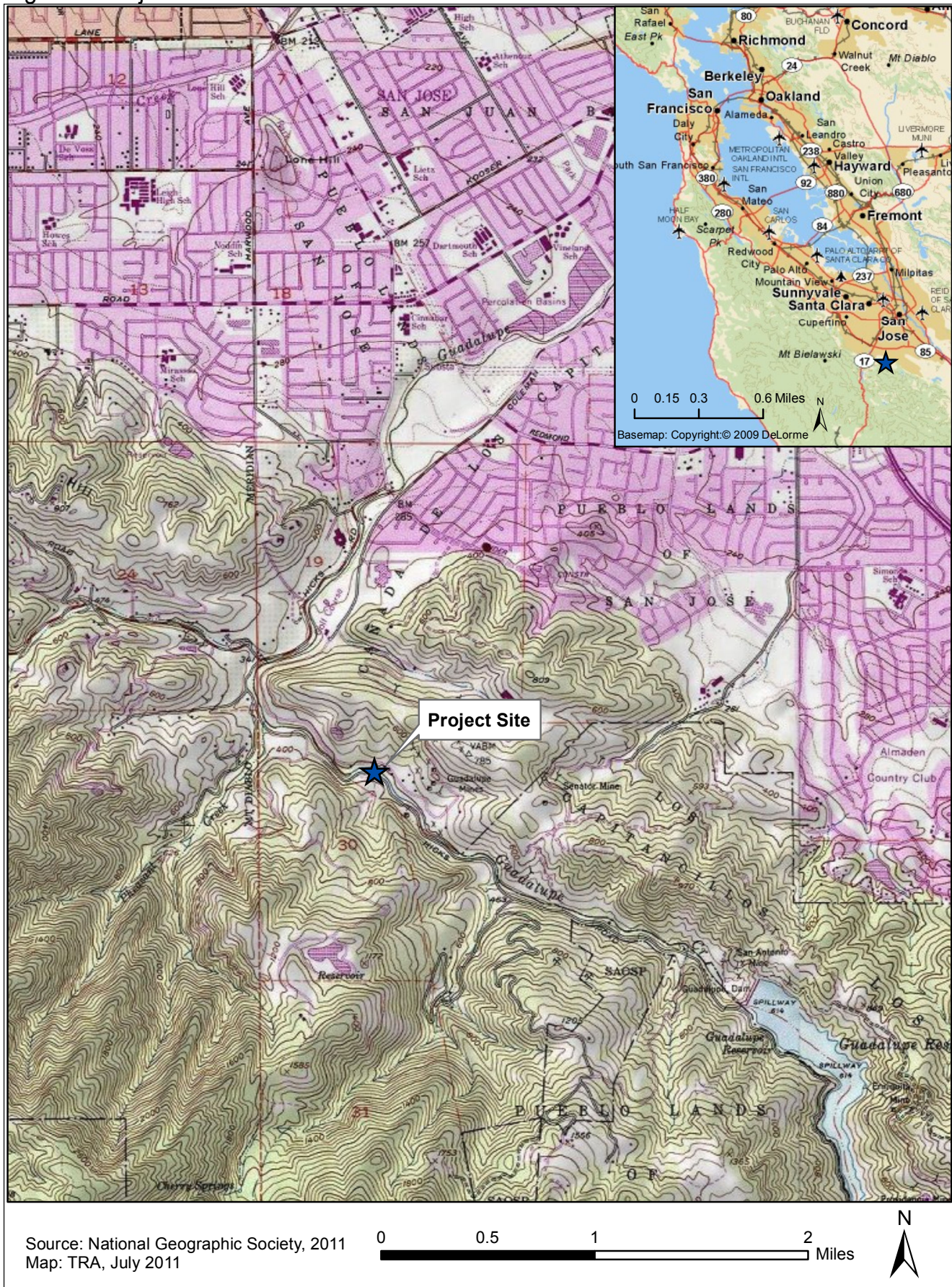
**LEAD AGENCY CONTACT INFORMATION:**

City of San Jose Planning, Building and Code Enforcement  
200 E. Santa Clara Street  
San Jose, CA 95113

Contact: Bill Roth, (408) 535-7837, [bill.roth@sanjoseca.gov](mailto:bill.roth@sanjoseca.gov)



### Figure 1. Project



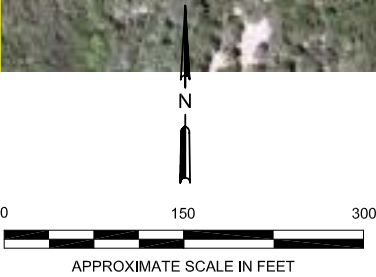




**LEGEND**

--- Boundary of project area

- NOTES:**
- 1. SOURCE OF MAP: GOOGLE EARTH
  - 2. ALL SITE LOCATIONS, EXCAVATION/DISTURBANCE EXTENTS AND TEMPORARY STOCKPILES ARE APPROXIMATE.
  - 3. PROJECT LOGISTICS ASSOCIATED WITH EXCAVATION, STOCKPILING AND EQUIPMENT/VEHICLE INGRESS AND EGRESS ARE THE RESPONSIBILITY OF THE CONTRACTOR.



REVISION	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
	4/29/11	INITIAL SUBMITTAL	SCS	SL	SL



**Stantec**

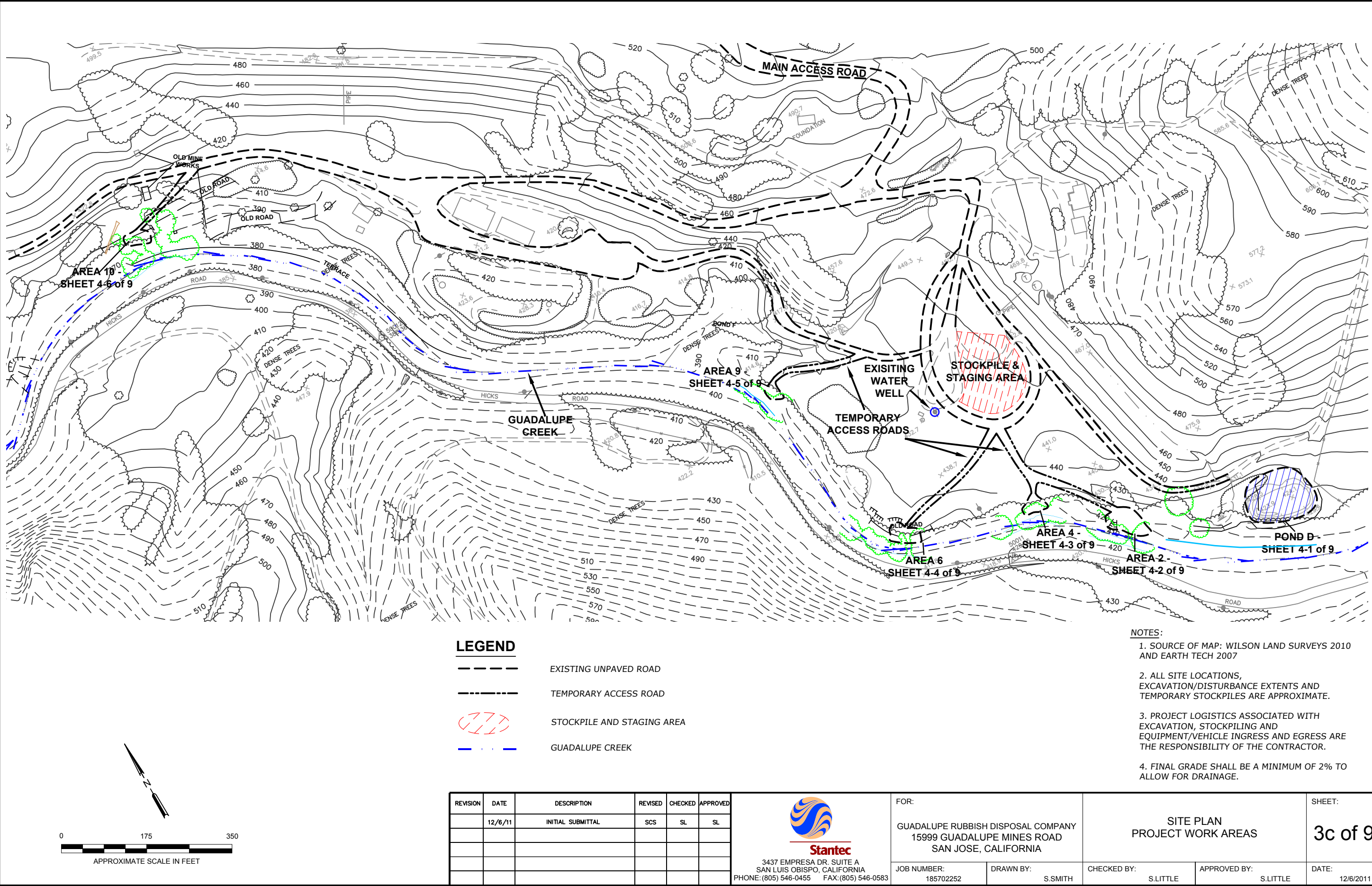
3437 EMPRESA DR. SUITE A  
SAN LUIS OBISPO, CALIFORNIA  
PHONE: (805) 546-0455 FAX: (805) 546-0583

FOR:  GUADALUPE RUBBISH DISPOSAL COMPANY 15999 GUADALUPE MINES ROAD SAN JOSE, CALIFORNIA	
JOB NUMBER: 185702252	DRAWN BY: S.SMITH

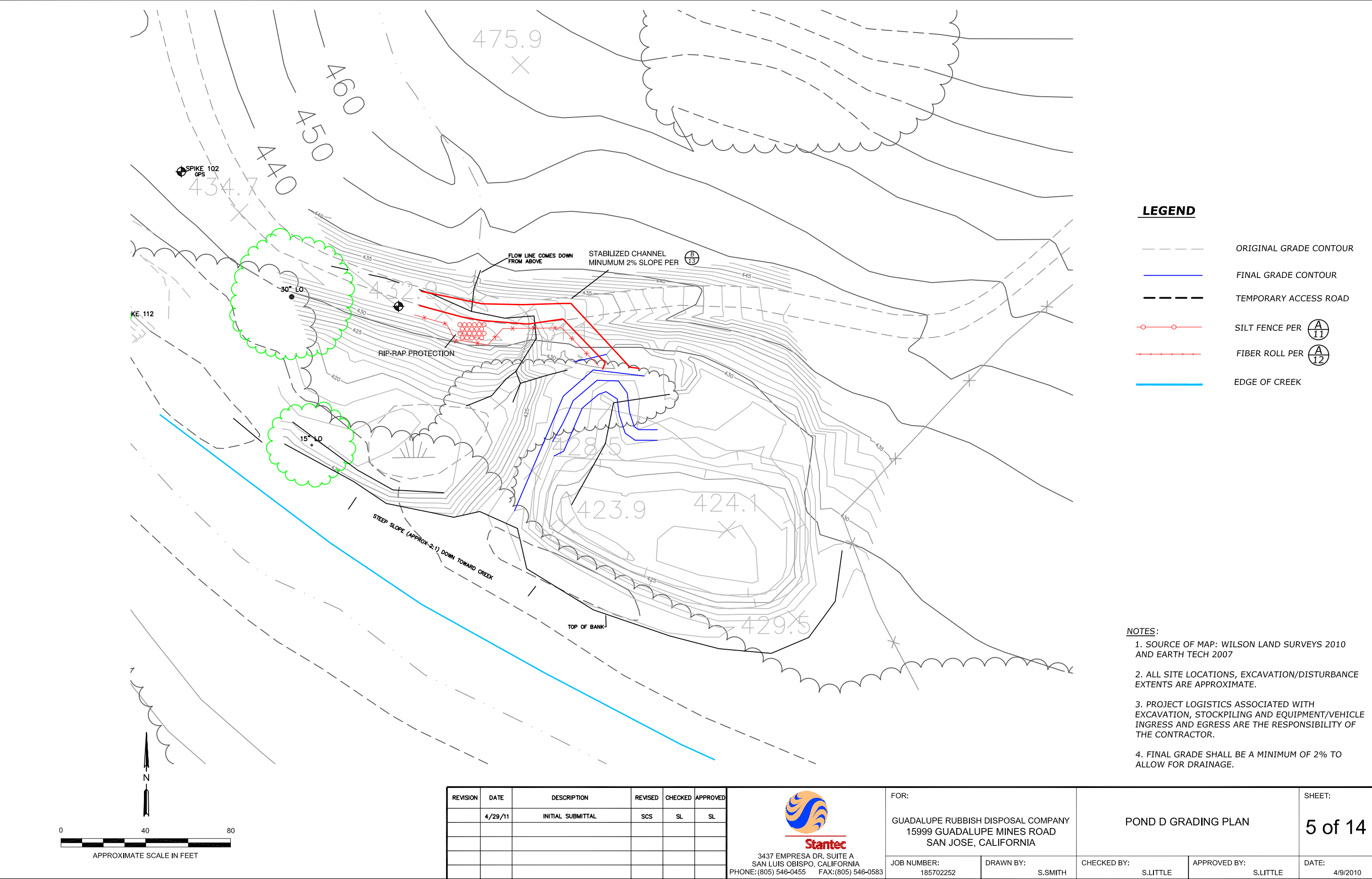
PROJECT ORIENTATION MAP	
CHECKED BY: S.LITTLE	APPROVED BY: S.LITTLE

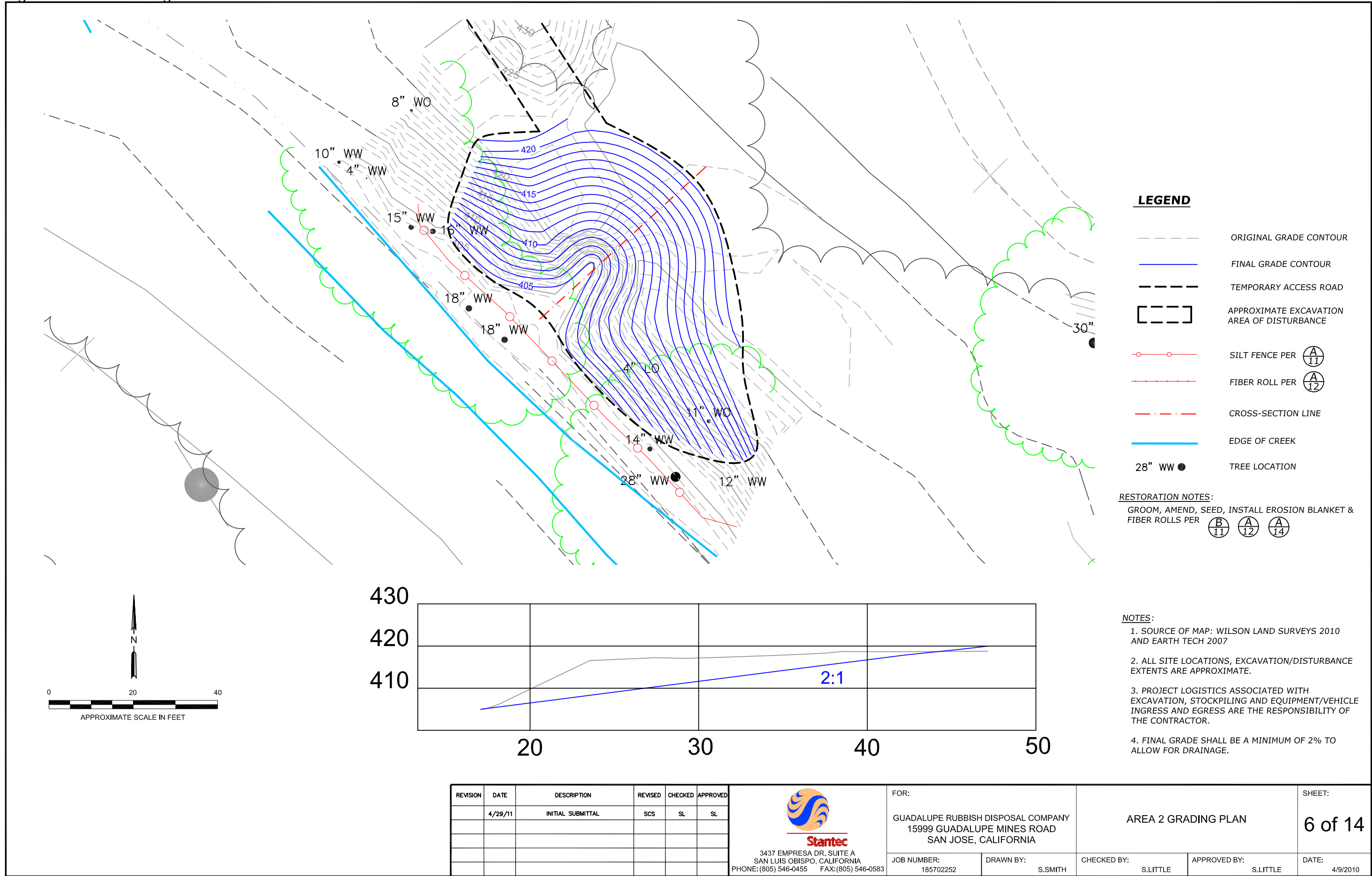
SHEET:  3 of 14
DATE: 4/9/2010

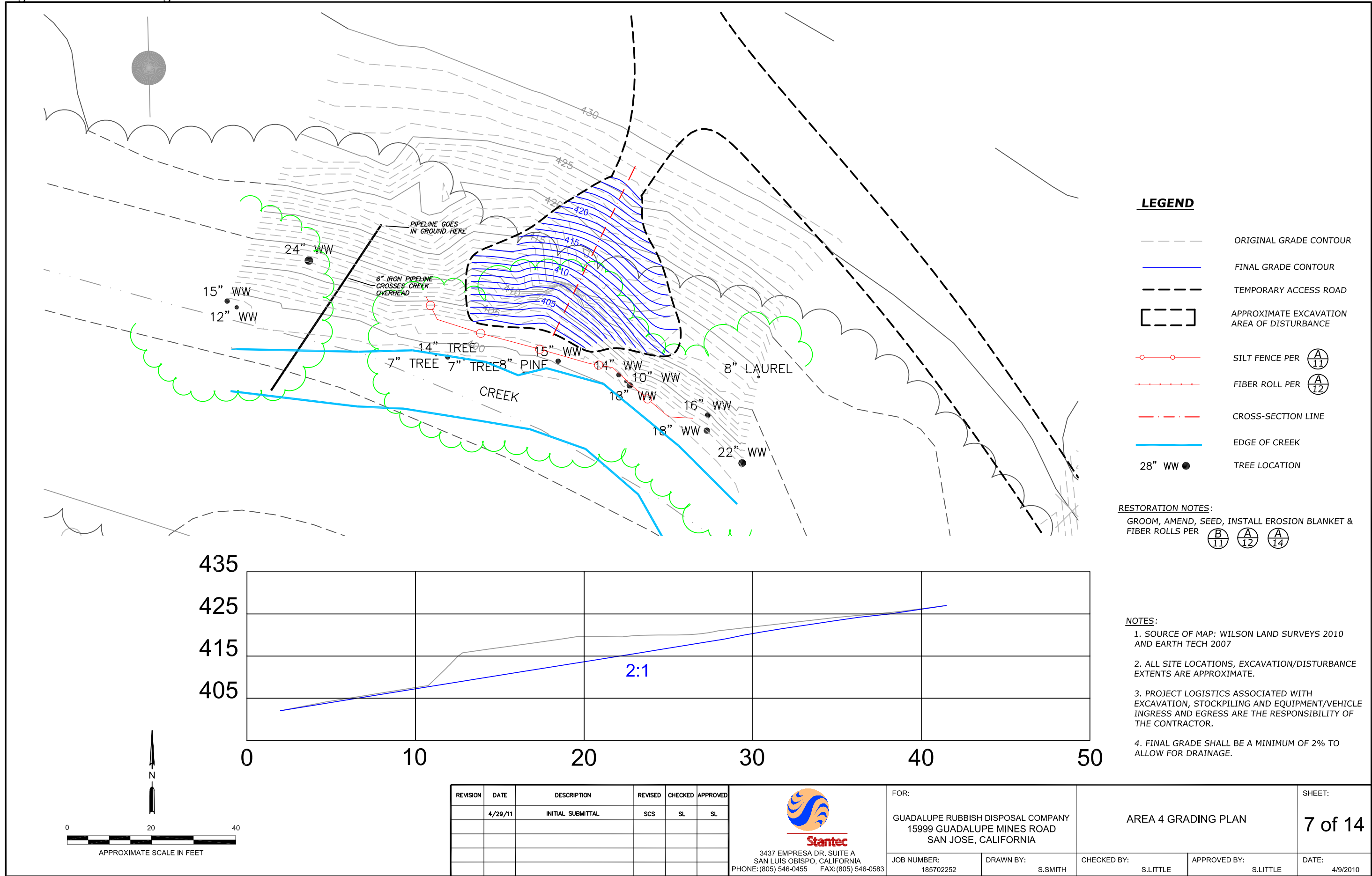


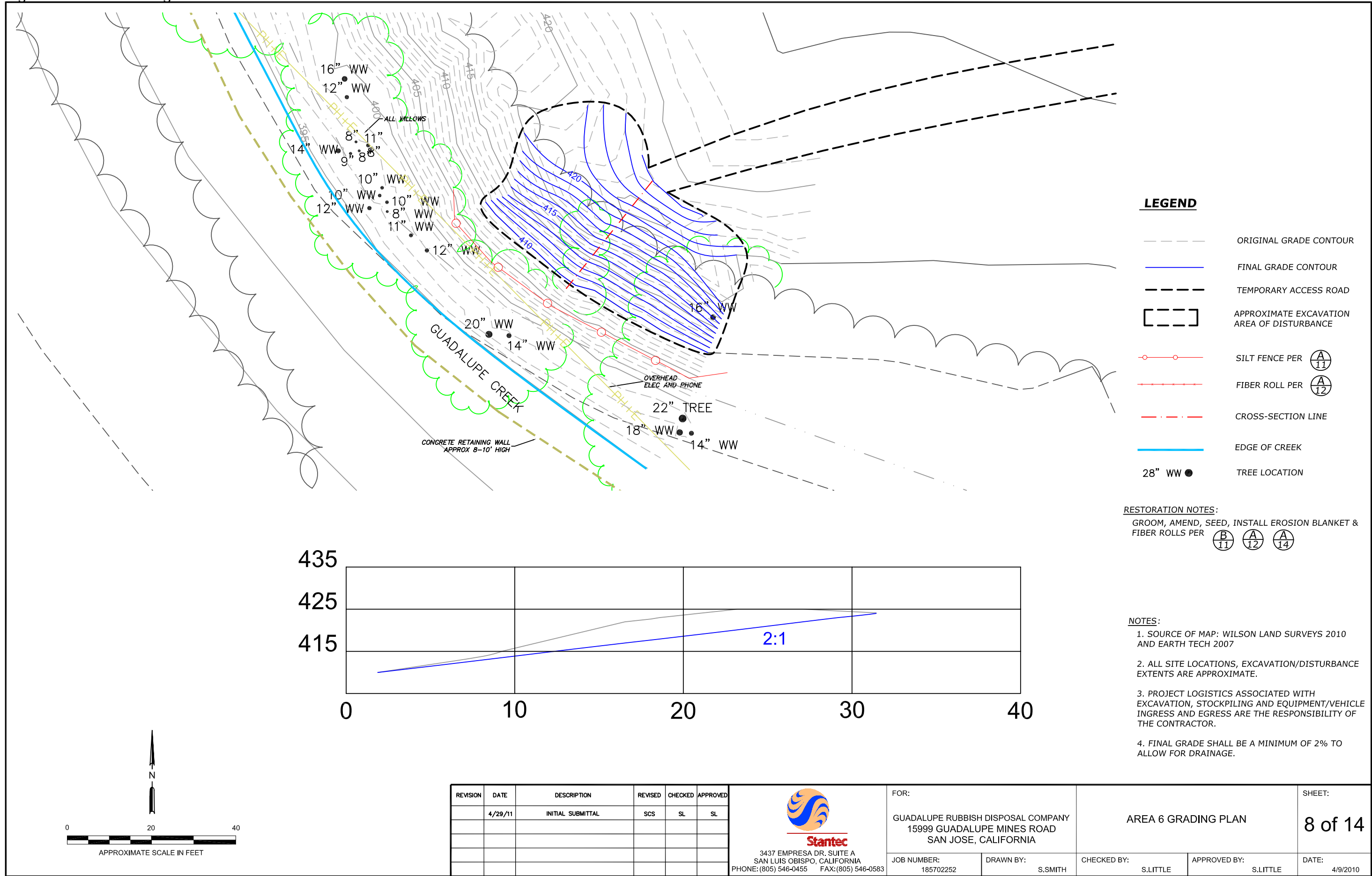




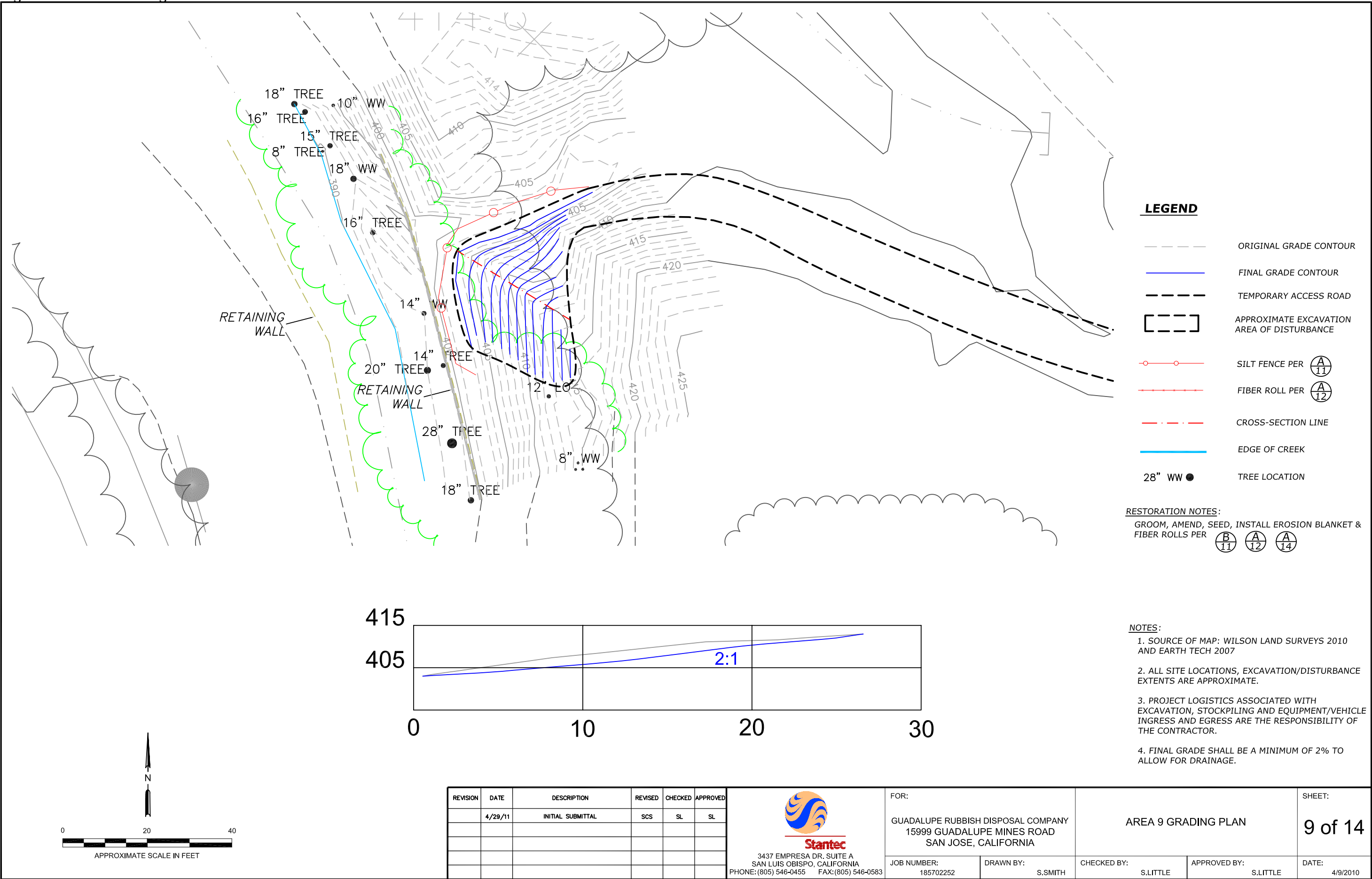


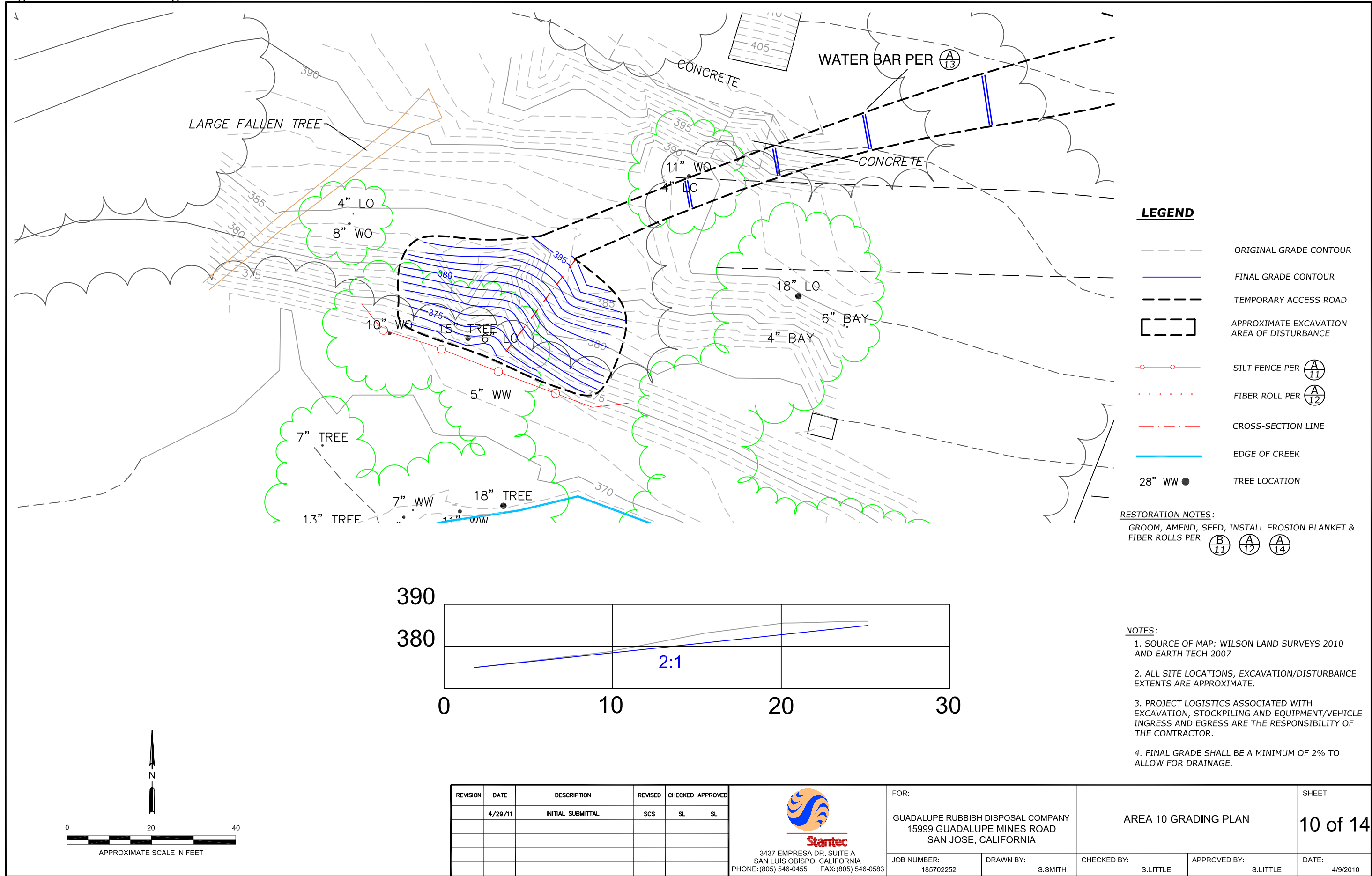












**DETERMINATION****On the basis of this initial study:**

<input type="checkbox"/>	I find the proposed project could not have a significant effect on the environment, and a <b>NEGATIVE DECLARATION</b> will be prepared.
<input checked="" type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the project proponent has agreed to revise the project to avoid any significant effect. A <b>MITIGATED NEGATIVE DECLARATION</b> will be prepared.
<input type="checkbox"/>	I find the proposed project could have a significant effect on the environment, and an <b>ENVIRONMENTAL IMPACT REPORT (EIR)</b> is required.
<input type="checkbox"/>	I find the proposed project could have a significant effect on the environment, but at least one effect has been (1) adequately analyzed in a previous document pursuant to applicable legal standards, and (2) addressed by mitigation measures based on the previous analysis as described in the attached initial study. An EIR is required that analyzes only the effects that were not adequately addressed in a previous document.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, no further environmental analysis is required because all potentially significant effects have been (1) adequately analyzed in an earlier EIR or <b>NEGATIVE DECLARATION</b> pursuant to applicable standards, and (2) avoided or mitigated pursuant to that earlier EIR or <b>NEGATIVE DECLARATION</b> , including revisions or mitigation measures that are included in the project, and further analysis is not required.

November 12, 2012

Date



Signature

Name of Preparer:

## I. AESTHETICS

The viewshed of the project site primarily consists of Guadalupe Creek and associated riparian vegetation, and surrounding open space with native shrubland and annual grassland vegetation. Dominant shrub and tree species in the riparian corridor adjacent to Guadalupe Creek include Coast live oak, valley oak, California bay laurel (*Umbellularia californica*), big-leaf maple, California sycamore, white alder and Himalayan blackberry (*Rubus discolor*). The surrounding shrubland includes coyote brush (*Baccharis pilularis*), California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), poison oak (*Toxicodendron diversilobum*), toyon (*Heteromeles arbutifolia*), and manzanita (*Arctostaphylos* spp.). Dominant herbs and grasses include stork's bill (*Erodium* sp.), bird's foot trefoil (*Lotus corniculatus*), vetch (*Vicia sativa*), sweet clover (*Melilotus officinalis*), and chickweed (*Stellaria media*). The five areas proposed for creek stabilization are covered with erosion control blankets and fiber rolls. Hicks Road is visible intermittently opposite the creek. Historic remnants of the Guadalupe Mines such as the concrete and wooden chute near Area 10 or the concrete creek channel near Area 9 are also visible in the project area. Shrub-covered hillsides are visible in the distance. The hills near the site are sparsely developed with homes.

Views from the project site and of the project site are limited by vegetation cover and hilly terrain. The project site is not visible from surrounding residential areas, but could be visible to traffic on Hicks Road. A section of the Guadalupe Trail in Almaden-Quicksilver County Park passes within approximately 600 feet of Area 2 at its closest point, but is not visible from the project site due to intervening topography and vegetation. No other public trails are near the project site.

<b>I. AESTHETICS - - Would the project:</b>					
<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b) Substantially damage scenic resources, including, but not limited to, trees, rock out-croppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
e) Increase the amount of shading on public open space (e.g. parks, plazas, and/or school yards)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

### FINDINGS:

The proposed project is for creek bank stabilization to prevent erosion and sedimentation along Guadalupe Creek. The project would not affect a scenic vista or alter the visual character of the site or its surroundings after construction. There would be a short-term impact to the visual character of the site during construction from construction equipment accessing the site. However, the site is not visible to surrounding land uses with the possible exception of traffic on Hicks Road. Hicks Road is not heavily used and the impact would be short-term, and therefore, not significant.

The project site is not within a state scenic highway (Caltrans, 2007), would not create a new source of light or glare, and would not increase the amount of shade on public open space.

### MITIGATION MEASURES:

None required.



## II. AGRICULTURE RESOURCES

The project area is not used for agriculture or forestry. The area is on land designated by the Farmland Mapping and Monitoring Program as Other Land or Urban and Built-up Land (California Department of Conservation, 2008). The project area is not under a Williamson Act contract (California Department of Conservation, 2006) and is not zoned for agricultural use. The area is not zoned for forestry and there are no timber resources in the project vicinity.

<b>II. AGRICULTURE RESOURCES - - Would the project:</b>					
<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	13, 23
c) Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4536), or timberland zoned Timberland production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	23
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	23
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12

### FINDINGS:

The project site is not located in an area identified as prime farmland, does not contain timber, and is not being used for or zoned for agricultural or forestry use. Therefore, the proposed project would not result in a significant impact on the City's or Region's agricultural or timber resources.

### MITIGATION MEASURES:

None Required.

## III. AIR QUALITY

### REGULATORY BACKGROUND:

Air quality is a function of pollutant emissions and topographic and meteorological influences. The physical features and atmospheric conditions of a landscape interact to affect the movement and dispersion of pollutants and determine its air quality.

The proposed project is located in the San Francisco Bay Area Air Basin (SFBAAB), an area of non-attainment for national and state ozone, state particulate matter (PM10), and national and state fine particulate matter (PM2.5) air quality standards (BAAQMD, 2012a).

The Bay Area Air Quality Management District (BAAQMD or the District) is responsible for maintaining air quality and regulating emissions of criteria and toxic air pollutants within the SFBAAB. The BAAQMD carries out this responsibility by preparing, adopting, and implementing plans, regulations, and rules that are designed to achieve attainment of state and national air quality standards. The BAAQMD currently has 12 regulations containing more than 100 rules that control and limit emissions from sources of air pollutants.

On September 15, 2010 the BAAQMD adopted the *Bay Area 2010 Clean Air Plan (CAP)*. This plan updates the District's 2005 *Ozone Strategy*, addresses ozone, PM, toxic air contaminants, and greenhouse gas emissions in a single, integrated document, and contains 55 control strategies that describe specific measures and actions that the District and its partners will implement to improve air quality, protect public health, and protect our climate. These measures focus on stationary and area sources, mobile sources, transportation control measures, land use, and energy and climate measures (BAAQMD, 2010a).

In May 2011, the BAAQMD updated its CEQA significance thresholds for emissions resulting from construction- and operations-related activities, including thresholds for precursor organic compounds (POCs), or reactive organic gases (ROG), and oxides of nitrogen (NO<sub>x</sub>), as well as PM<sub>2.5</sub> and PM<sub>10</sub> (BAAQMD, 2011)<sup>[1]</sup>. The BAAQMD considers projects that exceed the District's CEQA thresholds to have a significant air quality effect.

The BAAQMD's *Draft CEQA Air Quality Guidelines* do not identify "Landfill" as a land use/screening criteria category, however, the construction and operational screening criteria for a "city park" land use (the only open space land use listed in Table 3-1 of the BAAQMD's *CEQA Air Quality Guidelines*) is 67 and 2,613 acres, respectively (BAAQMD, 2011). These are assumed to be the applicable thresholds for the proposed project.

#### SENSITIVE RECEPTORS:

The Guadalupe Landfill, including the project site, is distant from sensitive receptors. The closest residential areas are Montego Drive to the north and the Piers Ranch subdivision to the east, both over a quarter mile distant from the project site. The closest schools are San Jose Unified School District (SJUSD) Castillero Middle at 6384 Leyland Park Drive, San Jose (approximately 1.5 mile northeast of the project site) and Los Gatos Christian (Venture Christian Church) at 16845 Hicks Road, Los Gatos (approximately 1 mile north of the project site). A section of the Guadalupe Trail in Almaden-Quicksilver County Park passes within approximately 600 feet of Area 2 at its closest point. No other public trails are near the project site.

<b>III. AIR QUALITY - - Would the activity:</b>					
<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5, 6, 7

<sup>[1]</sup> On March 5, 2012, the Alameda County Superior Court issued a judgment finding that the Air District had failed to comply with CEQA when it adopted its new CEQA Guidelines. In view of this court order, the Air District is no longer recommending use of the May 2011 CEQA Guidelines as a general measure of a project's significant air quality impacts (BAAQMD 2012b). Accordingly, this IS relies upon the BAAQMD's draft CEQA Guidelines for guidance regarding significance thresholds (BAAQMD 2010b).

<b>III. AIR QUALITY - - Would the activity:</b>					
<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

**FINDINGS:**

The proposed project would not conflict with or obstruct implementation of the BAAQMD's 2010 Clean Air Plan. The 2010 CAP includes particulate matter and ozone pre-cursor pollutant emissions of reactive organic gases (ROG) and oxides of nitrogen (NO<sub>x</sub>) generated from construction and mobile source activities throughout the BAAQMD in its emissions inventories and plans for achieving attainment of air quality standards (BAAQMD, 2010a). Project emissions would be short-term and small-scale and would not prevent attainment of CAP air quality standards.

The proposed project is below the BAAQMD's "city park" land use criteria air pollutant construction screening level size of 67 acres and would not require demolition activities, extensive site preparation, extensive material transport (i.e., greater than 10,000 cubic yards of soil import/export), or the simultaneous occurrence of more than two construction phases. Consistent with the BAAQMD's *CEQA Air Quality Guidelines*, projects that meet these screening criteria would result in a less than significant air quality impact and do not require a construction air quality assessment. Standard practices for dust control, described below under Standard Project Conditions, would prevent any air quality impacts related to construction dust.

Long-term air emissions impacts are associated with any change in permanent use of the project site by on-site stationary and off-site mobile sources that substantially increase vehicle trip emissions. No stationary sources are associated with the proposed project. Once completed, the project would not generate vehicle or other emissions. The proposed project would not violate air quality standards or result in a cumulatively considerable net increase of any criteria pollutant over the long-term.

Implementation of the proposed project would not result in permanent objectionable odors affecting a substantial number of people. Project construction is limited in duration, does not involve sources of objectionable odors, and the slope restoration project does not require the use of materials that emit objectionable odors.

**STANDARD PROJECT CONDITIONS:**

Consistent with BAAQMD Guidelines and City of San Jose Standard Project Conditions, the following construction practices shall be implemented during all phases of construction for the proposed project to prevent dust emissions from leaving the site.

- Water exposed surfaces (e.g., unpaved parking areas, staging areas, soil piles, graded areas, and unpaved access roads) daily or as needed for dust control.
- Vehicle speeds on unpaved roads shall not exceed 15 mph.
- Minimize equipment idling times to 5 minutes.
- Properly maintain and tune all construction equipment in accordance with manufacturer's specifications.

- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive).
- Replant vegetation in disturbed areas as quickly as possible.

#### MITIGATION MEASURES:

None Required.

### IV. BIOLOGICAL RESOURCES

TRA Environmental Sciences, Inc. prepared a biological study for the proposed project (TRA Environmental Sciences, Inc. 2011) that included a database search, literature review, field survey and written report to assess potential impacts to special-status species and other biological resources. The results of this study are summarized in the following sections.

#### REGULATORY SETTING:

The following federal, state and local regulations apply to the biological resources identified in this report.

#### **The Migratory Bird Treaty Act of 1918 (MBTA)**

Under the Migratory Bird Treaty Act (MBTA), it is unlawful to “pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not.” In short, under the MBTA it is illegal to disturb a nest that is in active use, since this could result in killing a bird or destroying an egg. The United States Fish and Wildlife Service (USFWS) oversees implementation of the MBTA. The proposed project could affect bird species protected by the MBTA.

#### **Federal Endangered Species Act (ESA)**

The Federal Endangered Species Act (FESA) of 1973 (16 USC §§ 1531 et seq.) protects fish and wildlife species that are listed as threatened or endangered, and their habitats. “Endangered” refers to species, subspecies, or distinct population segments that are in danger of extinction in all or a significant portion of their range. “Threatened” refers to species, subspecies, or distinct population segments that are considered likely to become endangered in the future.

The FESA prohibits “take” of any fish or wildlife species listed under the FESA as endangered or threatened. “Take” is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting a federally endangered or threatened species, or attempting to engage in such conduct. Take may also include habitat modification that actually kills or injures listed wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. The FESA also prohibits removing, digging up, cutting, or maliciously damaging or destroying federally listed plants on federal land. Federally listed species with the potential to occur in the project area include California red-legged frog (*Rana draytonii*) and the steelhead (*Onocorhynchus mykiss*) Central California Coast Distinct Population Segment.

#### **California Endangered Species Act (CESA)**

Provisions of CESA protect state-listed threatened and endangered species. The Fish and Game Commission is charged with establishing a list of endangered and threatened species. The California Department of Fish and Game (CDFG) regulates activities that may result in “take” of individuals (i.e., “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”). Habitat degradation or modification is not expressly included in the definition of “take” under the California Fish and Game Code, but CDFG has interpreted “take” to include the killing of a member of a species which is the proximate result of habitat modification. There are no state-listed species with the potential to occur in the project area.

### **Fish and Game Code Section 3503 and 3503.5**

Pursuant to Fish and Game Code section 3503, it is unlawful to “take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.” Section 3503.5 provides similar protection specifically to raptors and their nests. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “taking” by CDFG. The proposed project could affect bird species protected by the Fish and Game Code.

### **Fish and Game Code Section 4150**

Pursuant to Fish and Game Code section 4150, “[a]ll mammals occurring naturally in California which are not game mammals, fully protected mammals, or fur-bearing mammals, are nongame mammals. Nongame mammals or parts thereof may not be taken or possessed except as provided in this code or in accordance with regulations adopted by the commission.” The proposed project could affect mammal species protected by Fish and Game Code.

### **CDFG California Species of Special Concern**

The CDFG has designated certain animal species as “California Species of Special Concern” (CSC) due to concerns about declining population levels, limited ranges, and continuing threats that have made these species vulnerable to extinction. The goal of this designation is to bring attention to these species in the hope that their population decline will be halted through mitigation or project redesign to avoid impact. CSC are protected only through environmental review of projects under the CEQA. The CDFG is a trustee agency and is solicited for its comments during the CEQA process. California Species of Special Concern with the potential to occur in the project area include steelhead, California red-legged frog, foothill yellow-legged frog (*Rana boylei*), western pond turtle (*Actinemys marmorata*), pallid bat (*Antrozous pallidus*) and San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*).

### **California Native Plant Society Inventory**

The California Native Plant Society (CNPS) has prepared and regularly updated an “Inventory of Rare and Endangered Vascular Plants of California.” In general, the CDFG qualifies plant species on List 1B (Plants Rare, Threatened, or Endangered in California and Elsewhere) or List 2 (Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere) of the CNPS Inventory for legal protection under CEQA. Species on CNPS List 3 (Plants About Which We Need More Information--A Review List) or List 4 (Plants of Limited Distribution--A Watch List) may, but generally do not, qualify for protection under CEQA. In order to provide a thorough disclosure, the plants on all of these lists are considered in this Initial Study (see Table 3). The proposed project would not impact CNPS listed plants.

### **Jurisdictional Waters (Clean Water Act Sections 401, 404)**

The Regional Water Quality Control Board (RWQCB) has regulatory authority over wetlands and waterways under both the federal Clean Water Act (CWA) and the State of California’s Porter-Cologne Water Quality Control Act (California Water Code, Division 7). Under the CWA, the Water Board has regulatory authority over actions in waters of the United States, through the issuance of water quality certifications (certifications) under Section 401 of the CWA. When the Water Board issues Section 401 certifications, it simultaneously issues general Water Discharge Requirements for the project, under the Porter-Cologne Water Quality Control Act. Activities in areas that are outside of the jurisdiction of the USACE (e.g., isolated wetlands, vernal pools, or stream banks above the OHWM) are regulated by the Water Board, under the authority of the Porter-Cologne Water Quality Control Act. Activities that lie outside of USACE jurisdiction may require the issuance of either individual or general waste discharge requirements (WDRs) from the Water Board. The proposed project would require a CWA Section 401 water quality certification because it would affect the banks of Guadalupe Creek, a water of the United States.

CWA Section 404 establishes a program to regulate the discharge of dredged and fill material into waters of the United States, including wetlands. Responsibility for administering and enforcing Section 404 is shared by the U.S. Army Corps of Engineers (USACE) and the U.S. Environmental Protection Agency (EPA). USACE administers the day-to-

day program, including individual permit decisions and jurisdictional determinations; develops policy and guidance; and enforces Section 404 provisions. The EPA develops and interprets environmental criteria used in evaluating permit applications, identifies activities that are exempt from permitting, reviews/comments on individual permit applications, enforces Section 404 provisions, and has authority to veto USACE permit decisions. The proposed project would not require a CWA Section 404 permit because no work would occur below the OHWM.

### **Fish and Game Lake and Streambed Alteration Agreement (Code Section 1600)**

Streams and lakes, as habitat for fish and wildlife species, are subject to jurisdiction by the CDFG under Sections 1600-1616 of the California Fish and Game Code. Alterations to or work within or adjacent to streambeds or lakes generally require a 1602 Lake and Streambed Alteration Agreement. The term stream, which includes creeks and rivers, is defined in the California Code of Regulations (CCR) as follows: "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (14 CCR 1.72). In addition, the term stream can include ephemeral streams, dry washes, water courses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance, if they support aquatic life, riparian vegetation, or stream dependent terrestrial wildlife (CDFG Environmental Services Division, 1994). Riparian is defined as "on, or pertaining to, the banks of a stream;" therefore, riparian vegetation is defined as, "vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself" (CDFG Environmental Services Division, 1994). Removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from CDFG. The proposed project would require a Section 1602 Lake and Streambed Alteration Agreement because it affects stream banks and would be adjacent to a streambed.

### **GRDC Wildlife Habitat Council Certification**

The Wildlife Habitat Council (WHC) *Wildlife at Work* and *Corporate Lands for Learning* programs focus on involving company employees, community members, conservation organizations, and government agencies in the long-term, active management of private or public land to improve wildlife habitat and raise environmental awareness. Sites that meet the criteria of the programs are awarded a WHC Certification. The GRDF applied for and was granted a WHC Certification in 2009. In June of 2011, the GRDF applied for renewal of the certification but still has not received a response from the WHC. As part of the WHC Certification application, a Wildlife Management Plan was prepared for the GRDF (Zito, GRDC and TRA Environmental Sciences, Inc., 2009). The proposed project was identified in the WMP as Project #3: Creek Bank Restoration.

### **Santa Clara Valley Habitat Conservation Plan**

To promote the recovery of endangered species while accommodating planned development, infrastructure and maintenance activities, the Local Partners, consisting of the City of San Jose, Santa Clara Valley Transportation Authority, Santa Clara Valley Water District, Santa Clara County and the cities of Gilroy and Morgan Hill, are preparing a joint Habitat Conservation Plan/Natural Community Conservation Plan (Habitat Plan). The Santa Clara Valley Habitat Plan (Plan) is being developed in association with the USFWS and CDFG and in consultation with stakeholder groups and the general public to protect and enhance ecological diversity and function within more than 500,000 acres of southern Santa Clara County.

The Santa Clara Habitat Plan Planning Agreement outlines the Interim Project Process to ensure coordination of projects approved or initiated in the Planning Area before completion of the Habitat Plan to help achieve the preliminary conservation objectives of the plan, and not preclude important conservation planning options or connectivity between areas of high habitat values. The Interim Project Process requires the local participating agencies to notify the wildlife agencies (CDFG and USFWS) of projects that have the potential to adversely impact Covered Species, natural communities, or conflict with the preliminary conservation objectives of the Habitat Plan. The wildlife agencies comments on Interim Projects should recommend mitigation measures or project alternatives that would help achieve the preliminary conservation objectives of the Habitat Plan. The project site is outside the Habitat Planning Area, although it borders the western boundary.

### **Three Creeks Habitat Conservation Plan**

The Three Creeks Habitat Conservation Plan (Three Creeks HCP) is being developed by the Santa Clara Valley Water District (SCVWD) to protect and enhance habitats for a suite of aquatic species and provide conservation for species impacted by SCVWD's on-going water supply operations in the northern Santa Clara Valley. The Three Creeks HCP covers implementation of capital projects and operations and maintenance activities within its study area related to water supply. In addition to the water supply activities, the Three Creeks HCP contains a Conservation Program targeted at the conservation of listed fish species. The geographic area of the Three Creeks HCP includes the Coyote Watershed, the Guadalupe Watershed and the Steven's Creek Watershed. The proposed project is within the area covered by the Three Creeks HCP and is a Covered Activity under this HCP.

### **San Jose Tree Removal Regulations**

Section 13.32 of the San Jose Municipal Code requires a permit for the removal of any live tree on private property, which requires a certified arborist's report, permit application and fee. Section 13.32.110(D) requires replacement trees "roughly proportionate to the tree replacement needed to alleviate and address the burdens and other impacts created by allowing the removal of the tree or trees under the permit." Section 13.28.330 of the Municipal Code defines a heritage tree as: "Any tree which, because of factors including but not limited to its history, girth, height, species or unique quality, has been found by the city council to have a special significance to the community. . ." Trees on the heritage list are protected from removal or destruction (Municipal Code Section 13.28.340). There are no trees on the San Jose Heritage Tree list in the project area. The project would require tree removal, a tree permit and tree replacement.

### **San Jose Permit for Guadalupe Landfill**

The landfill operates under a Planned Development Permit from the City of San Jose (PD93-05-018). Condition 14 of the permit states:

"14. Riparian Setback. No grading, storage of equipment, vehicles and material or other disturbance is allowed within 100 feet of the top of bank of Guadalupe Creek or within 100 feet of the edge of riparian vegetation."

Because this project requires work within this setback, an amendment to PD93-05-018 is necessary before the work can occur.

The PD Permit also specifies that the removal of trees 56-inches or greater in diameter measured 4.5 feet above grade will be mitigated in-kind at a 4:1 ratio with either 4 24-inch box trees or 1 24-inch box tree, 3 15-gallon trees, and 11 5-gallon trees. No trees that are 56-inches or greater in diameter 4.5 feet above grade will be affected by the project. Two trees will be removed and replaced at a 3-to-1 ratio.

### **VEGETATION:**

Vegetation communities present in the project area are described below.

### **Stream/Aquatic and Ordinary High Water Mark**

Guadalupe Creek itself is a relatively fast moving, open water channel with no areas of emergent wetland vegetation (e.g., cattails). Riparian vegetation is well developed along the banks, as described below. The water flow in Guadalupe Creek is controlled by Guadalupe Reservoir. As a likely result, the ordinary high water mark (OHWM) is limited to the lower portion of the banks, just above the creek bed. Based on observations during high winter flows, the OHWM does not extend more than 18 inches up the stream banks. Field evidence used to identify the OHWM included drift marks, benching, and changes in the vegetation. Guadalupe Creek provides habitat for invertebrates, fish, and amphibians, including federally protected fish and amphibian species. Project activities would be outside for the OHWM and would not affect wetland vegetation.

## Riparian Woodland

Riparian woodland depends on the water supplied by streams and generally forms a corridor of trees and understory plants on the stream banks. The riparian woodland along Guadalupe Creek is dominated primarily by willows (*Salix* spp.). Other common trees include Coast live oak, valley oak, California bay laurel, big-leaf maple, California sycamore, and white alder. Himalayan blackberry is often present in the understory along the creek banks. Riparian habitat provides breeding, cover and forage habitat for wildlife, including birds, mammals, fish and amphibians.

## Coyote Brush Shrubland

This habitat occurs on the hilly terrain surrounding Guadalupe Creek and is dominated by coyote brush. Other common species include California sagebrush, California buckwheat, poison oak, toyon, and manzanita. Shrubland provides breeding, forage and cover habitat for birds and small mammals.

## Annual Grassland

Annual grassland is interspersed in the coyote brush shrubland and is dominated by non-native annual grasses and herbs. Dominant species include wild oats (*Avena* sp.), Stork's bill, vetch, chickweed, sweet clover, bird's foot trefoil, yellow star thistle (*Centaurea solstitialis*), and milk thistle (*Silybum marianum*). A few native herbs occur, such as California poppy (*Eschscholzia californica*), miner's lettuce (*Claytonia perfoliata*), and soap plant (*Chlorogalum pomeridianum*). Annual grassland provides habitat to burrowing animals and ground-nesting birds, and foraging habitat for raptors.

## Eucalyptus Stands

There is a small cluster of blue gums (*Eucalyptus globulus*) upland from Guadalupe Creek that could provide habitat for nesting birds, such as raptors and cavity-nesting birds. The eucalyptus stand also serves as a granary for acorn woodpeckers (*Melanerpes formicivorus*). These non-native trees are invasive and can have negative effects on natural plant communities, however in this situation they provide habitat for native birds and have not significantly affected the surrounding well-established natural habitat.

## WILDLIFE:

Invertebrates observed during the field survey included ladybugs (*Coccinella septempunctata*) and butterflies, such as Acmon blue (*Plebejus acmon*), cabbage white (*Pieris rapae*), and common buckeye (*Junonia coenia*); many other common insect, spider and other invertebrate species are likely to be present on the site.

Reptiles and amphibians observed include western fence lizard (*Sceloporus occidentalis*) and Pacific tree frog (*Hyla regilla*); other species likely to be present include southern alligator lizard (*Cerrhonotus multicarinatus*), western rattlesnake (*Crotalus viridis*), and gopher snake (*Pituophis catenifer*), among others.

Bird species observed included raptors, such as red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*) and American kestrel (*Falco sparverius*); corvids, such as common raven (*Corvus corax*), Stellar's jay (*Cyanocitta stellari*) and western scrub jay (*Aphelocoma californica*); and numerous songbirds, such as California towhee (*Pipilo crissalis*), song sparrow (*Melospiza melodia*), wrentit (*Chamaea fasciata*), oak titmouse (*Baeolophus inornatus*), Anna's hummingbird (*Calypte anna*), and many others.

The only mammal observed on site was a black-tailed jackrabbit (*Lepus californicus*); however, other mammals known to be present in the vicinity include raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), gray fox (*Urocyon cinereoargenteus*), coyote (*Canis latrans*), mule deer (*Odocoileus hemionus*), mountain lion (*Puma concolor*), bobcat (*Lynx rufus*), wild pig (*Sus scrofa*), and rodents, such as gray squirrel (*Sciurus griseus*) and California vole (*Microtis californicus*) (Zito and TRA Environmental Sciences, Inc., 2009).



## SPECIAL-STATUS PLANTS:

According to California Natural Diversity Database (CNDDDB) records (CNDDDB, 2011), fifteen species of special-status plants occur within five miles of the project site (Figure 9). No special-status plants are expected to occur on or near the project site due to a lack of suitable habitat (Table 3), and to the disturbed nature of the site observed during the field visit. Many of the special-status plants with the potential to occur in the region require serpentine soils which occur on the property but are not widespread at the project site, based on field investigation. No special-status plants were observed during reconnaissance level field surveys, and none are expected to be impacted by the project.

## SPECIAL-STATUS ANIMALS:

The majority of the listed species identified by the database searches are not expected to occur within the project area, either because the project area does not support their required habitat or because the project area is outside the species' known range (Table 3). According to CNDDDB records (CNDDDB, 2011), ten special-status animal species occur within five miles of the project site. It was determined that two special-status animal species, steelhead (*Oncorhynchus mykiss*) and San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*), are known to occur in the project area, and four special-status animal species, California red-legged frog (*Rana draytonii*), foothill yellow-legged frog (*Rana boylei*), western pond turtle (*Emys marmorata*) and pallid bat (*Antrozous pallidus*) could potentially occur in the project area. A description of each of these species is provided below.

Table 3. Special-status Species in the Project Area

Species Name	Status	General Habitat Description	Potential for Species to Occur/Rationale
<b>Plants</b>			
arcuate bush-mallow ( <i>Malacothamnus arcuatus</i> )	U.S.: None CA: None CNPS: 1B	Chaparral or cismontane woodland from 15 to 355 meters elevation.	Low Potential. Suitable habitat present but species not recorded in vicinity of project site.
Brewer's clarkia ( <i>Clarkia breweri</i> )	U.S.: None CA: None CNPS: 4	Chaparral, cismontane woodland, or coastal scrub often on serpentine soils; from 215 to 1115 meters elevation.	Species Absent. Project site outside of species' elevation range.
bristly leptosiphon ( <i>Leptosiphon acicularis</i> )	U.S.: None CA: None CNPS: 4	Chaparral, cismontane woodland, coastal prairie, or valley and foothill grassland, from 55 to 1500 meters.	Low Potential. Suitable habitat present but species not recorded in vicinity of project site.
California androsace ( <i>Androsace elongata</i> ssp. <i>acuta</i> )	U.S.: None CA: None CNPS: 4	Chaparral, cismontane woodland, coastal scrub, meadows and seeps, pinyon and juniper woodland, or valley and foothill grassland; from 150 to 1200 meters elevation.	Low Potential. Suitable habitat present but species not recorded in vicinity of project site.
caper-fruited tropidocarpum ( <i>Tropidocarpum capparideum</i> )	U.S.: None CA: None CNPS: 1B	Valley and foothill grassland on alkaline hills from 1 to 455 meters elevation.	Species Absent. No suitable habitat (alkaline hills) present.
Congdon's tarplant ( <i>Centromadia parryi</i> ssp. <i>congdonii</i> )	U.S.: None CA: None CNPS: 1B	Valley and foothill grassland on alkaline soils 0 to 425 meters elevation.	Species Absent. No suitable habitat (alkaline soils) present.
fragrant fritillary ( <i>Fritillaria liliacea</i> )	U.S.: None CA: None CNPS: 1B	Cismontane woodland, coastal prairie, coastal scrub, or valley and foothill grassland, often on serpentine soils. From 3 to 410 meters elevation.	Species Absent. No suitable habitat present.
hairless popcorn flower ( <i>Plagiobothrys glaber</i> )	U.S.: None CA: None	Meadows and seeps in alkaline soils or marshes and swamps with	Species Absent. No suitable habitat present.

Species Name	Status	General Habitat Description	Potential for Species to Occur/Rationale
	CNPS: 1A	coastal salt from 15 to 180 meters elevation.	
hall's bush mallow ( <i>Malacothamnus hallii</i> )	U.S.: None CA: None CNPS: 1B	Chaparral and coastal scrub from 10 to 760 meters elevation.	Low Potential. Suitable habitat present but species not recorded in vicinity of project site.
large-flowered leptosiphon ( <i>Leptosiphon grandiflorus</i> )	U.S.: None CA: None CNPS: 4	Coastal bluff scrub, closed-cone coniferous forest, cismontane woodland, coastal dunes, coastal prairie, coastal scrub, or valley and foothill grassland, usually on sandy soils, from 5 to 1220 meters elevation.	Species Absent. No suitable habitat (sandy soils) present and not recorded in vicinity of project site.
Loma Prieta hoita ( <i>Hoita strobilina</i> )	U.S.: None CA: None CNPS: 1B	Chaparral, cismontane woodland, or riparian woodland; usually mesic habitats on serpentine soils 30 to 860 meters elevation.	Species Absent. No suitable habitat present.
Metcalf Canyon jewel-flower ( <i>Streptanthus albidus</i> ssp. <i>albidus</i> )	U.S.: FE CA: None CNPS: 1B	Valley and foothill grassland on serpentine soils 45 to 800 meters elevation.	Species Absent. No suitable habitat present.
most beautiful jewel-flower ( <i>Streptanthus albidus</i> ssp. <i>peramoenus</i> )	U.S.: None CA: None CNPS: 1B	Chaparral, cismontane woodland, or valley and foothill grassland on serpentine soils from 94 to 1,000 meters elevation.	Species Absent. No suitable habitat present.
Mount Hamilton fountain thistle ( <i>Cirsium fontinale</i> var. <i>campylon</i> )	U.S.: None CA: None CNPS: 1B	Chaparral, cismontane woodland, or valley and foothill grassland in serpentine seeps at 100 to 890 feet elevation.	Species Absent. No suitable habitat present.
phlox-leaf serpentine bedstraw ( <i>Galium andrewsii</i> ssp. <i>gatense</i> )	U.S.: None CA: None CNPS: 4	Chaparral, cismontane woodland, or lower montane coniferous forest on rocky serpentine soils, from 150 to 1450 meters elevation.	Species Absent. No suitable habitat present.
robust monardella ( <i>Monardella villosa</i> ssp. <i>globosa</i> )	U.S.: None CA: None CNPS: 1B	Broadleafed upland forest openings, chaparral openings, cismontane woodland, coastal scrub, or valley and foothill grassland; from 100 to 915 meters elevation.	Low Potential. Suitable habitat present but species not recorded in vicinity of project site.
robust spineflower ( <i>Chorizanthe robusta</i> var. <i>robusta</i> )	U.S.: FE CA: None CNPS: 1B	Chaparral (maritime), cismontane woodland openings, coastal dunes, coastal scrub; from 3 to 300 meters elevation.	Species Absent. No suitable habitat present.
San Francisco collinsia ( <i>Collinsia multicolor</i> )	U.S.: None CA: None CNPS: 1B	Closed-cone coniferous forest or coastal scrub sometimes on serpentine soils at 30 to 250 meters elevation.	Species Absent. No suitable habitat present.
Santa Clara red ribbons ( <i>Clarkia concinna</i> ssp. <i>automixa</i> )	U.S.: None CA: None CNPS: 4	Chaparral or cismontane woodland from 90 to 1500 meters.	Low Potential. Suitable habitat present but species not recorded in vicinity of project site.
Santa Clara Valley dudleya ( <i>Dudleya abramsii</i> ssp. <i>setchellii</i> )	U.S.: FE CA: None CNPS: 1B	Cismontane woodland or valley and foothill grassland in serpentine or rocky soils from 60 to 455 meters elevation.	Species Absent. No suitable habitat present.

Species Name	Status	General Habitat Description	Potential for Species to Occur/Rationale
Serpentine leptosiphon ( <i>Leptosiphon ambiguus</i> )	U.S.: None CA: None CNPS: 4	Cismontane woodland, coastal scrub, or valley and foothill grassland usually in serpentine soils from 120 to 1130 meters elevation.	Species Absent. No suitable habitat present.
smooth lessingia ( <i>Lessingia micradenia</i> var. <i>glabrata</i> )	U.S.: None CA: None CNPS: 1B	Chaparral or cismontane woodland on serpentine soils and often on roadsides, from 120 to 420 meters elevation.	Species Absent. No suitable habitat present.
South Coast Range morning glory ( <i>Calystegia collina</i> ssp. <i>venusta</i> )	U.S.: None CA: None CNPS: 4	Chaparral, cismontane woodland, or valley and foothill grassland, from 425 to 1490 meters elevation.	Species Absent. Project site is outside of species elevation range.
woodland woollythreads ( <i>Monolopia gracilens</i> )	U.S.: None CA: None CNPS: 1B	Broadleafed upland forest openings, chaparral openings, cismontane woodlands, north coast coniferous forest openings, or valley and foothill grassland; on serpentine soils from 100 to 1200 meters elevation.	Low Potential. Suitable habitat present but species not recorded in vicinity of project site.
woolly-headed lessingia ( <i>Lessingia hololeuca</i> )	U.S.: None CA: None CNPS: 3	Broadleafed upland forest, coastal scrub, lower montane coniferous forest, or valley and foothill grassland on clay serpentine soils; from 15 to 305 meters elevation.	Species Absent. No suitable habitat present.
<b>Invertebrates</b>			
Bay checkerspot butterfly ( <i>Euphydryas editha bayensis</i> )	U.S.: FT CA: None	Restricted to native grasslands on outcrops of serpentine soil in the vicinity of San Francisco Bay. <i>Plantago erecta</i> is the primary host plant; <i>Orthocarpus densiflorus</i> & <i>O. purpurascens</i> are the secondary host plants.	Species Absent. No suitable habitat (native grasslands on outcrops with host plants) present. No Critical Habitat on site.
Zayante band-winged grasshopper ( <i>Trimerotropis infantilis</i> )	U.S.: FE CA: None	Isolated sandstone deposits in the Santa Cruz Mountains, mostly on sand parkland habitat but also in areas with well-developed groundcover and in sparse chaparral with grass.	Species Absent. No suitable habitat (sandy areas or sparse chaparral with grass in mountains) present.
<b>Fish</b>			
Coho salmon – central CA coast ( <i>Oncorhynchus kisutch</i> )	U.S.: FE CA: SE CDFG: None	Rear and feed in streams and small freshwater tributaries. Spawning habitat is small streams with stable gravel substrates. Adult non-breeding life cycle is spent foraging in estuarine and marine waters.	Species Absent. Suitable habitat present, but no records of this species in Guadalupe Creek or Guadalupe-Los Gatos Watershed. No Critical Habitat on site.
Steelhead – Central California Coast ESU ( <i>Oncorhynchus mykiss irideus</i> )	U.S.: FT CA: None CDFG: CSC	Cool perennial streams of good water quality and moderately complex habitat, with unimpeded access to the ocean during winter and spring months of the year.	Species Present. Species known to be present in Guadalupe Creek.

Species Name	Status	General Habitat Description	Potential for Species to Occur/Rationale
<b>Amphibians/Reptiles</b>			
California red-legged frog ( <i>Rana aurora draytonii</i> )	U.S.: FT CA: None CDFG: CSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development.	Moderate Potential. Suitable habitat present, closest recorded observation is approximately 1 mile downstream of project site. No Critical Habitat on site.
California tiger salamander ( <i>Ambystoma californiense</i> )	U.S.: FT CA: ST CDFG: CSC	Need underground refuges, especially ground squirrel burrows and vernal pools or other seasonal water sources for breeding.	Species Absent. No suitable habitat present. No seasonal ponds on site and few ground squirrel burrows in the project area. No Critical Habitat on site.
foothill yellow-legged frog ( <i>Rana boylei</i> )	U.S.: None CA: None CDFG: CSC	Partly shaded, shallow streams and rifles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg-laying.	Moderate Potential. Suitable habitat is present; the closest recorded observation of this species is approximately ½ mile upstream from project site.
western pond turtle ( <i>Emys marmorata</i> )	U.S.: None CA: None CDFG: CSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation. Need basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg laying.	Moderate Potential. Suitable habitat is present; however the closest recorded observation of western pond turtle is approximately 2 miles to the northwest in Los Gatos.
<b>Birds</b>			
Black swift ( <i>Cypseloides niger</i> )	U.S.: None CA: None CDFG: CSC	Summer migrant. Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea bluffs above the surf.	Species Absent. No breeding habitat on site.
<b>Mammals</b>			
pallid bat ( <i>Antrozous pallidus</i> )	U.S.: None CA: None CDFG: CSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	Low Potential. Suitable roosting habitat is not present in the project site (area of disturbance).
San Francisco dusky-footed woodrat ( <i>Neotoma fusciceps annectens</i> )	U.S.: None CA: None CDFG: CSC	Forest habitats of moderate canopy and moderate to dense understory; may prefer chaparral and redwood habitats.	Species Present. Species has been observed on the Guadalupe Landfill property.
San Joaquin kit fox ( <i>Vulpes macrotis mutica</i> )	U.S.: FE CA: None CDFG: None	Annual grasslands or grassy open stages with scattered shrubby vegetation. Need loose-textured sandy soils for burrowing, and suitable prey base.	Species Absent. Project area is outside of species' range.

*Federal Status (U.S.):* Federal Endangered (FE); Federal Threatened (FT)

*State Status (CA):* State Endangered (SE); State Threatened (ST)

*California Native Plant Society Status (CNPS):* Plants Presumed Extinct in California (1A); Plants Rare, Threatened and Endangered in California and Elsewhere (1B); Plants Rare, Threatened and Endangered in California, but More Common Elsewhere (2); Plants for Which More Information is Needed (3); Plants of Limited Distribution (4)

*California Department of Fish and Game Status (CDFG):* California Species of Special Concern (CSC)

**Steelhead**

Steelhead, a CSC, is an anadromous form of rainbow trout, meaning this species of fish spends part of its life cycle in fresh water and part in salt water. The older juvenile and adult life stages occur in the ocean, until the adults ascend freshwater streams to spawn. The National Marine Fisheries Service (NMFS) has determined that steelhead using Santa Clara County streams is part of the Central California Coast Distinct Population Segment (DPS). This DPS is listed as threatened under the FESA. The Guadalupe River up to the confluence of Guadalupe Creek and Alamitos Creek is designated as critical habitat. Steelhead has been found throughout Guadalupe Creek downstream from the Guadalupe Reservoir (including the project area) and in small numbers upstream from the reservoir from 1953 to 2001.

**California red-legged frog**

California red-legged frog (CRF), federally threatened, CSC, uses a variety of habitat types, including various aquatic, riparian, and upland habitats. CRF can use many aquatic systems, provided a permanent water source, ideally free of nonnative predators, is nearby. However, individual frogs may complete their entire life cycle in a pond or other aquatic site that is suitable for all life stages. CRF breeds in aquatic habitats, such as marshes, ponds, deep pools and backwaters in streams and creeks, lagoons, and estuaries. The closest recorded occurrence of CRF to the project site is approximately 1 mile upstream from the project site. Suitable habitat for CRF exists in the project area, but no CRF has been found on the project site.

**Foothill yellow-legged frog**

Foothill yellow-legged frog, a CSC, is a highly aquatic amphibian that prefers streams with a rocky substrate. These frogs prefer partial shade, shallow riffles, and cobble-sized or greater substrate. Adult frogs may disperse into small tributary streams with persistent water following breeding. FYF has been recorded approximately ½ mile upstream from the project site. Suitable habitat for FYF exists in the project area, but no FYF has been observed on the project site.

**Western pond turtle**

Western pond turtle (WPT), a CSC, is the only turtle native to California. WPT is associated with a variety of aquatic habitats, both permanent and intermittent. The name western “pond” turtle is something of a misnomer, as ponds are relatively scarce throughout most of the range of this species, and the turtles are more often associated with rivers and streams. They are usually rare or absent in reservoirs, impoundments, canals, or other bodies of water heavily altered by humans. The closest CNDDDB recorded occurrence of WPT is approximately 2 miles northwest in Los Gatos, in the vicinity of Gum Tree Lane and Francis Oak Way. Suitable habitat for WPT exists in the project area, but no WPT have been observed on or near the project site.

**Pallid bat**

Pallid bat, a CSC, occurs in a wide variety of habitats, including grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. The species is most common in open, dry habitats with rocky areas for roosting. It is a yearlong resident in most of the range. The closest CNDDDB recorded occurrence of pallid bat is approximately ¾ mile north of the project site, ¼ mile southwest of the northern terminus of Hicks Road. Preferred roosting habitat for this species is not present at the project site; therefore, it is unlikely to occur.

**San Francisco dusky-footed woodrat**

San Francisco dusky footed woodrat (SFDW) is a CSC. It occurs generally along the Coast Range of California, from the San Francisco Bay Area south to the Pajaro River watershed. It is associated with riparian, oak woodland and redwood forest. The SFDW is one of 11 subspecies of dusky-footed woodrat that live in California and the arid west. SFDW build mounded stick lodges that may range in size from 3 to 8 feet across at the base and as much as 6 feet tall, and they tend to live in colonies of 3 to 15 or more lodges. The lodges or houses can be quite complex inside, with

multiple chambers for general living, nesting, latrine use, food storage, and other activities. The availability of suitably-sized sticks may limit the number of woodrat houses. SFDW were observed in the project area during 2008 and 2009 species inventories. No houses were found to occur in the specific restoration areas, the access route, or the stockpile and staging areas.

#### WILDLIFE CORRIDORS:

Guadalupe Creek functions as a wildlife corridor for anadromous fish, amphibians and other aquatic animals. For example, steelhead spawn in the creek, and then the young fish move along Guadalupe Creek to the Guadalupe River, the San Francisco Bay and ultimately the Pacific Ocean after spending a couple of years in the freshwater environment. After one to two years, they return to Guadalupe Creek to spawn. Other aquatic animals move shorter distances to forage, access breeding sites or upland habitats (amphibians).

The natural habitats surrounding Guadalupe Creek, including riparian woodland, shrubland and annual grassland, may also act as a corridor for wildlife moving between the GRDF property and surrounding Almaden Quicksilver County Park, the Santa Cruz Mountains, and other open spaces in the project region. Migratory birds may use the project area seasonally, or as a stopover point en route further north or south. Large and small mammals likely use the project area year round to move between the surrounding open spaces mentioned above.

#### IV. BIOLOGICAL RESOURCES - - Would the project:

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	29
b) Have a substantial adverse effect on any aquatic, wetland, or riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	29
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act including, but not limited to, marsh, vernal pool, coastal, etc., through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	29
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3, 29
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29



**FINDINGS:****Potential Impacts to Special-status Species***Steelhead*

The proposed project would not result in any permanent adverse impacts to steelhead. The long term effects of the project would be beneficial to steelhead as existing erosion hazard would be repaired, and the potential for sediment to be carried into Guadalupe Creek from the project site would be minimized. Steelhead could be present in Guadalupe Creek as adults or juveniles between April 15 and October 15 when this project construction would occur. Project work would not occur between December and mid-April when steelhead migrate and spawn. Steelhead would not be directly impacted during construction, as no work would occur within the wetted area of Guadalupe Creek.

Equipment refueling, fluid leakage, and equipment maintenance are not expected to pose the risk of contamination to aquatic habitat, as all fuel storage, refueling, and equipment staging would be located in an upland location well away from the stream channel. However, grading and excavation activities on the creek bank have the potential to increase erosion and sedimentation of Guadalupe Creek over the short-term. Implementation of standard project conditions for water quality protection (Section IX. Hydrology and Water Quality, Standard Project Conditions) and spill clean-up (Section VIII. Hazards and Hazardous Materials, Standard Project Conditions) would reduce impacts to water quality and aquatic habitat to a minimum. Implementation of Mitigation Measure BIO-1 would further ensure that water quality is protected and impacts to steelhead are avoided. Short term increases in turbidity are not expected to reduce the survival of individual steelhead.

Due to the relatively small project footprint and short construction duration, the project would not result in any cumulative effects on steelhead. The project would not adversely affect the ability of steelhead to disperse through Guadalupe Creek. The project site would be revegetated with native species after construction. In addition, the reduction in the amount of sediment entering Guadalupe Creek is expected to provide an overall benefit to habitat quality for steelhead.

*California Red-legged Frog, Foothill Yellow-legged Frog and Western Pond Turtle*

Guadalupe Creek provides suitable movement and foraging habitat and moderately suitable breeding habitat for CRF, FYF and WPT, and nearby annual grassland areas potentially provide suitable upland habitat for all three species. The proposed project would not cause any permanent impacts to CRF, FYF or WPT. The long-term effects of the project would be beneficial, as the amount of sediment entering Guadalupe Creek would be minimized and re-vegetated areas could provide cover for CRF, FYF and WPT.

CRF, FYF or WPT could be impacted during the short-term grading and excavation activities if they are present in or move into the project site and are killed by construction equipment. CRF, FYF and WPT could also be impacted during construction if there is an impact to water quality, such as if oil, fuel, or other pollutants were accidentally spilled during construction and allowed to enter the creek. Also, runoff bearing sediment from construction activities could adversely affect habitat within the creek if unmanaged and allowed to enter the creek. These species could also fall into and become trapped in excavated holes or trenches. Finally, these species could become entrapped in synthetic netting, if used for erosion control. Mitigation Measures BIO-1 through BIO-5 and standard project conditions for water quality protection (Section IX. Hydrology and Water Quality, Standard Project Conditions) and spill clean-up (Section VIII. Hazards and Hazardous Materials, Standard Project Conditions) would reduce any impacts to CRF, FYF or WPT during construction to a less than significant level.

Due to the relatively small project footprint and short construction duration, the project would not result in any cumulative effects on CRF, FYF or WPT. The project would not adversely affect the ability of CRF, FYF or WPT to disperse through Guadalupe Creek. The project site would be revegetated with native species. In addition, the stabilization of Guadalupe Creek banks is expected to improve habitat quality for CRF, FYF and WPT by reducing future erosion.

### *Pallid Bat and Other Bats*

The project area contains suitable roosting, foraging and breeding habitat for pallid bat and other bat species potentially present in the project area, such as hoary bat (*Lasiurus cinereus*). The proposed project would not cause any permanent impacts to pallid bat or other bat species. Bats could be impacted during the short term construction period if trees used as roosting sites are trimmed or removed. Mitigation Measures BIO-1.1 and BIO-1.6 would minimize impacts to bats during construction. Due to the short-term and small-scale nature of construction activities, no cumulative impacts to pallid bat or other bat species are expected.

### *San Francisco Dusky-footed Woodrat*

The project would not cause any permanent adverse impacts to SFDW. Over time, the revegetated areas could provide habitat for SFDW. The proposed project could impact SFDW during grading and excavation activities if there are any SFDW houses in or within five feet of the project site, or if SFDW use the project site for foraging or movement. Mitigation Measures BIO-1.1, BIO-1.3 and BIO-1.7 would minimize impacts to SFDW during construction. Due to the short-term and small-scale nature of construction activities, no cumulative impacts to SFDW are expected.

### *Nesting Birds*

Raptors and other birds in the project area use the vegetation in the project area for nesting. The proposed project could impact nesting birds protected under the MBTA if vegetation removal, grading or excavation work occurs during the bird breeding season (February 1st through August 31st). Mitigation Measure BIO-2.1 would minimize impacts to nesting birds during construction. No long-term or cumulative impacts to nesting birds would occur as a result of the proposed project, since vegetation would be replaced.

## **Potential Impacts to Sensitive Habitats**

### *Guadalupe Creek*

The proposed project would not directly impact Guadalupe Creek as no work would occur below the OHWM. However, the creek could be indirectly impacted due to an accidental spill of construction fuels or fluids, or due to an increase in sediment entering the creek due to construction activities. These impacts would be minimized with the placement of silt fences and other erosion control devices during and following construction, and revegetation after construction. Standard project conditions for water quality protection (Section IX. Hydrology and Water Quality, Standard Project Conditions) and spill clean-up (Section VIII. Hazards and Hazardous Materials, Standard Project Conditions) would further prevent temporary impacts to the creek. The proposed project would have beneficial impacts to water quality in the creek over the long-term by decreasing the amount of sediment entering the creek.

The proposed project would also require a number of permits from agencies to minimize impacts to the creek. A CWA Section 404 Permit is not required as no work would occur below the OHWM or in a wetland. However, a CWA Section 401 Water Quality Certification is required because grading and excavation activities could result in discharges to Guadalupe Creek. A California Fish and Game Code Section 1600 Streambed Alteration Agreement is required because the proposed project would impact the creekbank. An Encroachment Permit from the Santa Clara Valley Water District may also be required, as well as a City of San Jose PD Permit amendment to allow grading within 100 feet of the creek.

### *Riparian Habitat*

The riparian habitat adjacent to Guadalupe Creek is considered a sensitive habitat. Project impacts to riparian habitat include the removal and trimming of riparian trees, and the removal of shrubs and herbaceous vegetation in the five areas along the creek bank to be repaired. All impacts would be short-term and temporary. The creekbank would be revegetated with a native seed mix and the trees would be replaced upland of the creek at a 3:1 ratio (Mitigation Measure BIO-3.1). Construction impacts to retained trees would be minimized (Mitigation Measure BIO-3.2). If revegetation is not successful, the project could have a permanent or cumulative effect on the riparian habitat.

### *Pond D*

Pond D is an artificial pond used as a storm water retention basin and is not a jurisdictional wetland or a sensitive habitat.

## Tree Removal

An arborist surveyed the five areas of concern on May 12, 2011 (Barrie Coate and Associates, 2011) and recorded the diameter, height, spread and health of trees in and adjacent to proposed areas of ground disturbance. This inventory included ten trees at Area 2, eight trees at Area 4, six trees at Area 6, seven trees at Area 9 and five trees at Area 10 for a total of thirty-six trees. Of these trees, two would be removed, nine would likely be impacted by trimming or grading near the roots, and twenty five are unlikely to be impacted. The trees that would be removed include a western black willow (*Salix lasiandra*) at Area 6 and a coast live oak at Area 10. Trees that could be subject to trimming or root damage include three valley oaks (one at Area 2 and two at Area 10), one big leaf maple and one western black willow at Area 2, one white alder and two western sycamore at Area 4, and one coast live oak at Area 9 (See Project Description Table 2). A Tree Removal Permit would be needed from the City prior to removal of any trees. Mitigation Measures BIO-3.1 and BIO-3.2 would ensure compliance with the City's tree protection regulations (Municipal Code Section 13.32 and Ordinances 21362, 26595) and would reduce impacts to trees to a less than significant level.

## Habitat Conservation Plans

The proposed project is not within the Santa Clara Valley HCP Plan Area (SCVWD *et al.*, 2010), but is within the area covered by, and is a Covered Activity under, the Three Creeks HCP (see Regulatory Setting above). The Three Creeks HCP has not yet been adopted. Notwithstanding, the proposed project would not conflict with the provisions of the draft HCP provisions with implementation of Mitigation Measures BIO-1.1 through BIO-2.1. No other habitat conservation plans or natural community conservation plans apply to the project area.

### MITIGATION MEASURES:

#### Impacts to Special-status Species

The project site contains habitat for special status species, and although presence of special status species has not been confirmed, precautions should be taken to avoid impacts to special status species. CRF, FYF or WPT could be impacted during the short-term grading and excavation activities if they are present in or move into the project site and are killed by construction equipment. CRF, FYF and WPT could also be impacted during construction if there is an impact to water quality, such as if oil, fuel, or other pollutants were accidentally spilled during construction and allowed to enter the creek, or if they are trapped in excavated holes, trenches, or the synthetic netting used in erosion control blankets. Bats could be impacted during the short term construction period if trees used as roosting sites are trimmed or removed.

**Impact BIO-1:** Construction activities could impact special status species. **(Less than Significant Impact with Mitigation Incorporated).**

**Mitigation Measures:** Implementation of the following mitigation measures will reduce impacts to special-status species to a less than significant level:

**MM BIO-1.1:** An employee education program shall be conducted prior to the initiation of project activities. The program will consist of a brief presentation by persons knowledgeable in federally-listed and state special status species biology and legislative protection to explain concerns to contractors and their employees. The program shall include: a) a description of the special-status species occurring or potentially occurring on the site; b) information on status of protected species and protection under state and federal laws; and c) a list of measures required during the project to reduce impacts to natural communities and special-status species. Crews shall be instructed what to do if an animal is found, including notifying the project foreman and the City of San Jose immediately. City of San Jose staff shall notify the appropriate wildlife agency. Educational materials will also provide information on protecting the creeks and wetlands from construction damage.

**MM BIO-1.2:** The biological monitor shall coordinate with the contractor to conduct pre-construction surveys for CRF, FYF and WPT immediately before initiation of any ground disturbing activities in each area. These surveys will

comprise walking transects while conducting visual encounter surveys within areas that will be subject to vegetation clearing, grubbing, grading, cut and fill, or other ground disturbing activities.

*MM BIO-1.3:* A qualified biologist shall be present during all grubbing and vegetation clearing activities that may affect CRF, FYF or SFDW. If at any point CRF, FYF, SFDW or any other listed species is discovered during these activities, all work will cease and the appropriate wildlife agency shall be contacted to determine how to proceed.

*MM BIO-1.4:* To prevent inadvertent entrapment of animals during construction, all excavated, steep-walled holes or trenches more than 2 feet deep shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled they must be thoroughly inspected for trapped animals. Any pipes or similar structures stored in the project site overnight shall be inspected before they are subsequently moved, capped and/or buried. If at any time a listed species is discovered, the on-site biological monitor shall be immediately informed. The on-site biological monitor shall determine if relocating the species is necessary and shall work with USFWS and CDFG prior to handling or relocating unless otherwise authorized.

*MM BIO-1.5:* To prevent animals from becoming entangled, trapped or injured, erosion control materials that contain synthetic mono-filament netting shall not be used within the project area. This includes products that use photodegradable or biodegradable synthetic netting, which can take several months to decompose. Acceptable materials include natural fibers such as jute, coconut (coir), twine or other similar fibers.

*MM BIO-1.6:* Surveys for roosting bats shall be conducted by a qualified biologist no more than thirty (30) days prior to any building demolition or removal, construction activities or Oak tree relocation and/or removal. If a female or maternity colony of bats is found on the project site, and the project can be constructed without disturbance to the roosting colony, a bat biologist shall designate buffer zones (both physical and temporal) as necessary to ensure the continued success of the colony. Buffer zones may include a 200-foot buffer zone from the roost and/or timing of the construction activities outside the maternity roosting season (after July 31 and before March 1). If an active nursery roost is known to occur on the site and the project cannot be conducted outside of the maternity roosting season, bats may be excluded after July 31 and before March 1 to prevent the formation of maternity colonies. Such exclusion shall occur under the direction of a bat biologist, by sealing openings and providing bats with one-way exclusion doors. In order to avoid excluding all potential maternity roosting habitat simultaneously, alternative roosting habitat, as determined by the bat biologist, should be in place at least one summer season prior to the exclusion. Adjacent oaks and oak woodland areas should be preserved to the maximum extent feasible as potential bat roosting habitat. Bat roosts should be monitored as determined necessary by a qualified bat biologist, and the removal or displacement of bats shall be performed in conformance with the requirements of the CDFG.

*MM BIO-1.7:* Not more than thirty (30) days before initial ground disturbance on the project site, a qualified biologist shall conduct a survey of the project site for any existing woodrat houses. If any woodrat houses are found within the project site, they shall be removed according to the following procedures. Prior to any disturbance of the woodrat house, logs and branches should be placed under the canopies of trees near, but outside of, the project site. Next, all understory vegetation shall be cleared within the project site or in the area immediately surrounding the houses (but the house itself should not be removed at this stage). After all cover (except the houses themselves) has been removed, each active house shall be disturbed (by a qualified wildlife biologist) to the degree that woodrats leave the nest and seek refuge elsewhere. The house sticks shall be removed from the project site and piled at the base of newly placed logs and branches outside the project site. Potential health hazards to persons moving nests should be addressed to minimize risk of contracting diseases associated with woodrats and woodrat houses. This mitigation measure shall be performed under the direct supervision of a biologist approved for this project by the CDFG.

## **Impacts to Nesting Birds**

Raptors and other birds in the project area use the vegetation in the project area for nesting. The proposed project could impact nesting birds protected under the MBTA if vegetation removal, grading or excavation work occurs during the bird breeding season (February 1st through August 31st).

**Impact BIO-2:** If construction takes place during the bird nesting season (February 1 through August 31), construction could impact nesting birds protected under the MBTA. **(Less than Significant Impact with Mitigation Incorporated).**

**Mitigation Measures:** Implementation of the following mitigation measures will reduce impacts to nesting birds to a less than significant level:

**MM BIO-2.1:** If feasible, vegetation removal shall be scheduled outside of the nesting season for raptors and other birds protected by the MBTA, such that vegetation removal occurs only from October 1 through December 31. If this is not possible, pre-construction surveys for nesting raptors and other birds shall be conducted by a qualified ornithologist to identify active nests that may be disturbed during project implementation. Between January and April (inclusive) pre-construction surveys shall be conducted no more than 14 days prior to the initiation of construction activities or tree removal. Between May and August (inclusive), pre-construction surveys shall be conducted no more than thirty (30) days prior to the initiation of these activities. The surveying ornithologist shall inspect all trees in and immediately adjacent to the construction area for nests. If an active nest is found in or close enough to the construction area to be disturbed by these activities, the ornithologist, shall, in consultation with the State of California, Department of Fish & Game (CDFG), designate a construction-free buffer zone (typically 250 feet for raptors and 50 feet for other birds) around the nest.

### **Impacts to Riparian Habitat**

The riparian habitat adjacent to Guadalupe Creek is considered a sensitive habitat. Project impacts to riparian habitat include the removal and trimming of riparian trees, and the removal of shrubs and herbaceous vegetation in the five areas along the creek bank to be repaired. All impacts would be short-term and temporary.

**Impact BIO-3:** The proposed project would result in the removal of riparian vegetation and two trees, including one western black willow and one coast live oak in the riparian corridor along Guadalupe Creek. These trees are protected by the City's Tree Protection Ordinance (Municipal Code Section 13.32). The project could also indirectly result in the death of additional trees due to trimming or grading in the root zone. The roots or branches of native riparian trees could be impacted during construction. **(Less than Significant Impact with Mitigation Incorporated).**

**Mitigation Measures:** Implementation of the following mitigation measures will reduce impacts to riparian habitat to a less than significant level:

**MM BIO-3.1:** Consistent with routine agency guidelines, the western black willow and the coast live oak to be removed by the project shall be replaced in kind at a 3:1 ratio in the project vicinity. The minimum size of each replacement tree will be a 24-inch box. Replacement trees shall be in good health and should be from local stock if feasible. All replacement trees shall be watered for at least one year after planting at least twice monthly during the dry season, after the soil is dry to the touch 3 inches below grade. Replacement trees shall be monitored and shall be re-planted if they die. Tree replacement shall comply with City of San Jose regulations and with permit requirements from the California Department of Fish and Game and the Regional Water Quality Control Board.

If the trees that have to be trimmed die, or grading occurs within the drip line and the tree dies, the tree shall be replaced in kind at a 3:1 ratio in the project area with a minimum 24-inch box size.

To provide plant diversity and include existing species in and adjacent to the riparian zone, the proposed hydroseed mix shall also include mugwort (*Artemisia douglasiana*), California figwort (*Scrophularia californica*; also known as California bee plant), coyote brush (*Baccharis pilularis*), California sage (*Artemisia californica*), and buckwheat (*Eriogonum fasciculatum*) (2 lbs/ac).

Willow poles shall be installed on the top of bank in each graded area, so that at least three willow poles are planted in each area. Willow poles are woody plant cuttings, capable of rooting, that are taken from trees and shrubs. All plant materials must be top quality stock, and it is desirable that the poles be taken from willows in the vicinity, including

the willow that would be removed as part of this project if it is healthy and has sufficient pole material. This will ensure that the plant materials are true to species. The trees from which these three poles will be cut shall be sound, healthy specimens. Plant materials that have serious injuries, insect pests, diseases or are shriveled, will be rejected. Willow poles shall be cut using a sharp tool. Live willow poles shall be from 5 to 8 ft in length with a basal end of 0.5 to 1.5 in. in diameter. The top ends shall be blunt; butt ends shall be angled at 45 degrees. The poles shall be stripped of all stems and leaves, taking care to minimize scarring or bruising. Immediately upon cutting, willow poles will be placed in water in a shaded area and shall be installed as soon as possible. If the installation is to be longer than 2 weeks, the poles can be planted in 15-gallon containers with at least 12 inches of soil cover.

The revegetation efforts shall be monitored for five years, and the monitoring shall be documented in an annual report. The performance standard is to achieve a minimum of 1:1 replacement of trees removed by the project by year 5, and a minimum 80 percent cover in the hydroseeded areas by year 2. Replanting shall occur as required to meet the performance standard. The planted areas shall be weeded of noxious invasive plant species, including primarily non-native thistles, broom species, and eucalyptus until vegetation is well established in the planted areas. Monitoring tasks and schedule are summarized in Table 4.

Also see Measure 3.2 regarding tree protection.

**Table 4. Monitoring Tasks, Schedule and Performance Standards**

<b>Element</b>	<b>Monitoring or Maintenance Task</b>	<b>Task Schedule for Five Year Monitoring</b>	<b>Performance Standard</b>
Tree mortality	Visually observe each tree or pole that is planted to ensure it is still alive; weed areas around tree to promote survival.	Observe and weed monthly for the first three months after planting, then observe twice per year	Minimum 1:1 replacement of trees removed by the project by year 5
Plant cover	Visually observe hydroseeded areas to ensure a diversity of species are established, and invasive thistles, broom and eucalyptus are not present.	Monthly for the first three months after planting, then twice per year	Minimum 80% cover after 2 years
Invasive weed control	Remove non-native thistle, broom species and eucalyptus from planted areas.	Monthly for the first three months after planting, then twice per year	Less than 1% cover of invasive thistle, broom or eucalyptus in hydroseeded areas
Remediation	Replace dead and/or dying vegetation if survivorship of original plantings falls below 80%.	Fall	See above

**MM BIO-3.2:** The following tree protection measures shall be included in the project in order to protect trees to be retained during construction and comply with City of San Jose guidelines:

- Damage to any tree during construction shall be reported to the City's Environmental Principal Planner, and GRDC contractors shall treat the tree for damage in the manner specified by the Environmental Principal Planner.
- No construction equipment, vehicles or materials shall be stored, parked or standing within the tree dripline; and
- Cutting and filling around the base of trees shall be done only after consultation with the city arborist and then only to the extent authorized by the city arborist; and



- No waste construction materials or wastewater shall be dumped on the ground between the dripline and the base of the tree or uphill from any tree where certain substances might reach the roots through a leaching process; and
- Barricades shall be constructed around the trunks of trees as specified by a qualified arborist so as to prevent injury to trees making them susceptible to disease causing organisms; and
- Wherever cuts are made in the ground near the roots of trees, appropriate measures shall be taken to prevent exposed soil from drying out and causing damage to tree roots.

## V. CULTURAL RESOURCES

Holman & Associates conducted an archaeological survey of the 100-acre southern portion of 15999 Guadalupe Mines Road, which includes the project area. The survey consisted of a records search at the Northwest Information Center of the California Historical Resources Information System (NWIC), agency and public consultation, background research on the Guadalupe Mines and a field survey.

The records search identified a large Native American site (CA-SCL-135) located at the main entrance of the GRDF Landfill and adjacent to Guadalupe Creek, and includes flaked stone and groundstone artifacts and a midden. Another prehistoric site (CA-SCL-136) was identified less than a quarter mile downstream and was described as a lithic workshop. The records search also identified the historic Guadalupe Mines, listed in the California Inventory of Historic Resources (CA-DPR 1976) for its economic and industrial contribution. In the vicinity of the Guadalupe Mines is the larger New Almaden Mines to the east that is listed as a Historic District on the National Register of Historic Places (added 1966 - District - #66000236) and as a National Historic Landmarks District.

Native American organizations and individuals, historic organizations and historians were contacted to obtain their input on the project. The Native American Heritage Commission (NAHC) was contacted in December 2010 and responded that they did not identify any Native American cultural resources in the immediate vicinity of the project area. Ten Native American individuals/organizations provided by the NAHC were also contacted. Two Native Americans (Ed Ketchum, Tribal Historian for the Amah Mutsun Tribal Band, and Irene Zwierlein) responded with concerns that the project area is sensitive for Native American artifacts. The Santa Clara County Historical and Genealogical Society, and History San José were contacted in December 2010, although there has been no response to date. Historians Charlene Duval and Franklin Maggi were contacted via phone and both expressed an interest in ensuring that any remains from the Guadalupe Mines were properly documented and if possible preserved. Finally, New Almaden Park Interpreter John Slender of Santa Clara County Parks was contacted, and he expressed an interest in saving buildings, structures, and objects that are slated to be removed or are falling into disrepair.

The field survey took place in December 2010 after an online review of library documents, publications and historic photographs. Forty six mining areas or discrete loci were identified including 21 mining areas, 10 historic-era or potentially historic-era standing buildings and structures and 20 short sections of roads. This district was assigned the state primary number of P-443-2400 and the state trinomial CA-SCL-891H. The original boundaries of the various mining activities and residential use of the Guadalupe Mines extend beyond the 100-acre study area: to the south were three additional locations; and to the north additional mining shafts and tunnels might extend along the ridgeline and down the other side of the hill; however, these areas were not surveyed. These features and loci are the remains from over 150 years of mercury mining and remining of this area. Many areas such as those where mining material was processed into mercury and tailings has been so drastically altered that no remains from these activities are visible. Mining shafts and tunnels have been covered for safety reasons; sometimes this has obliterated most mining indications.

Only a few buildings and structures date from or are likely from the 1800s, when the mines were the most prolific. These include the superintendent's house, the wooden building behind it, the miner's cabin, the brick warehouse and store (and later office), and possibly the wooden structure at Feature 27 by the shaft entrance. Early drift mining along Guadalupe Creek has been obliterated by remining efforts and periodic flooding. Discrete mining areas were recorded with most of the Guadalupe Creek bank likely assessed and drift mined, but these efforts have been obscured by later mining efforts, demolition of various aspects of the mining pursuits and features of the town, and flooding.

**V. CULTURAL RESOURCES - - Would the project:**

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
a) Cause a substantial adverse change in the significance of an historical resource as defined in CEQA Guidelines §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18
c) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18

**FINDINGS:**

The five creek bank stabilization areas are within the cultural resources district of Guadalupe Mines and the Town of Guadalupe. Several of the forty-six loci and features identified in the archaeological survey are near the creek bank stabilization areas, including the following:

- Feature 39 is a black pipe that crosses Guadalupe Creek (Near Areas 2 and 4).
- Feature 40 is water-related (Near Area 6).
- Feature 41 is a small retaining wall on the creek side of Hicks Road constructed from cobbles and concrete (Near Area 6).
- Locus 25 is a concrete pad with a three-sided above-ground structural element that was once bolted to wood (Near Area 9).
- Locus 27 is a mining area presently comprised of a structure clad with corrugated tin siding with a sliding garage door on its eastern end (Near Area 9).
- Locus 28 is an undulating mining area consistent with drift mining where the tunnels have collapsed or surface veins were explored (Near Area 9).
- Feature 42 is a 740-ft. long concrete creek channel or concrete flume than was previously described as constructed in 1917 to 1918 (Near Area 9).
- Locus 30 is the remains of a mining area that was once drift mined and then tunneled (Near Area 9).
- Locus 31 is an old mining road (Near Area 10).
- Locus 33 is a mining area with remnants of a wooden bridge/hoist on the uphill portion of the road (Near Area 10).
- Locus 34 is a mining area situated between Loci 33 and 35 just downhill from the main road (Near Area 10).

The proposed project would not demolish any historical buildings or structures. However, project construction could impact historical resources if it occurs within or directly adjacent to any of the above historical loci or features. Mitigation Measure CULT-1.1, listed below, would reduce potential impacts to historical resources to a less than significant level.

As stated previously, the records search identified two archaeological sites in the project vicinity, including a large Native American site (CA-SCL-135) that has flaked stone and groundstone artifacts and a midden located at the main entrance of the GRDF Landfill and adjacent to Guadalupe Creek, and a prehistoric site (CA-SCL-136) described as a lithic workshop located less than a quarter mile downstream. According to the archaeological survey prepared by Holman & Associates (2011), mining activities have erased all indications of any Native American cultural materials that may have existed in the project area. However, buried prehistoric or historic archaeological resources, or human

remains could be uncovered during grading and excavation activities. The standard project conditions listed below would prevent significant impacts to undiscovered archeological resources and human remains.

There are no known paleontological resources or unique geologic features in the project area. However, unknown paleontological resources could be uncovered during grading and excavation activities. The standard project conditions listed below would prevent impacts to unknown paleontological resources are uncovered during construction.

#### STANDARD PROJECT CONDITIONS:

Should evidence of prehistoric or historic cultural resources be discovered during construction, work within 50 feet of the find shall be stopped to allow adequate time for evaluation and mitigation by a qualified professional archaeologist. The material shall be evaluated and if significant, a mitigation program including collection and analysis of the materials at a recognized storage facility shall be developed and implemented under the direction of the City's Environmental Principal Planner.

As required by County ordinance, this project has incorporated the following guidelines. Pursuant to Section 7050.5 of the Health and Safety Code, and Section 5097.94 of the Public Resources Code of the State of California in the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Santa Clara County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he shall notify the Native American Heritage Commission who shall attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this State law, then the land owner shall re-inter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance.

If paleontological resources are uncovered during grading or excavation activities, earthwork within 25 feet of these materials shall cease until a qualified paleontologist has had an opportunity to evaluate the significance of the find. If the paleontological resources are not significant, avoidance is not necessary. If the paleontological resources are significant, the resources shall be avoided. If the paleontological resources are significant and cannot be avoided, adverse effects to the resources shall be mitigated. The mitigation options are dependent on the nature of the resource, and a preferred approach shall be selected by the City's Principal Environmental Planner in consultation with the consulting paleontologist. Mitigation may include, but shall not be limited to: a survey of the project area to identify other fossil occurrences; salvage excavation to obtain a representative sample of the identified species for analysis; preparation, including screen washing to recover small specimens (if applicable) and a specimen preparation to a point of stabilization and identification; identification, cataloging, curation, and storage at a museum or university that has a curator who can retrieve the specimens upon request; and a final report of the finds and their paleontological significance after all operations are completed.

#### MITIGATION MEASURES:

##### **Impacts to Historical Loci and Features**

The proposed project would not demolish any historical buildings or structures. However, project construction could impact historical resources if it occurs within or directly adjacent to any of the above historical loci or features.

*Impact CULT-1:* The proposed project could adversely impact historical loci and features identified in the archaeological survey conducted for the project area (Holman & Associates, 2011). **(Less than Significant Impact with Mitigation Incorporated).**

*Mitigation Measure CULT-1.1,* listed below, would reduce potential impacts to historical resources to a less than significant level.

**MM CULT-1.1:** GRDC shall retain a qualified historical archaeologist to depict cultural features and loci identified in the archaeological survey (Holman & Associates, 2011) on the project plans. The historical archaeologist shall also flag a ten foot buffer around all cultural features and loci that could be potentially impacted by the project. Project construction shall avoid the flagged cultural resources to the extent feasible. If construction work would occur within ten feet of any recorded features or loci, a historical archaeologist shall conduct a more detailed recording and historical research to evaluate the affected features or loci eligibility for listing on either California Register of Historical Resources or the National Register of Historic Places. If features or loci are not eligible, avoidance is not necessary. If features or loci are eligible, they shall be avoided or adverse affects shall be mitigated. New Almaden County Park expressed an interest in accepting buildings, structures, or objects that might need to be removed.

## VI. GEOLOGY AND SOILS

The project site lies in the foothills of the Santa Cruz Mountains, near the boundary with the Santa Clara Valley to the northeast. The Santa Cruz Mountains are a structural uplift composed of a complex assemblage of Jurassic-Cretaceous sedimentary, volcanic, and intrusive rocks, overlain by (or in fault contact with) younger Tertiary sedimentary rocks. Most dominant is a “complex composite serpentine body, which is intrusive into deformed clastic<sup>1</sup> sedimentary rocks and greenstone of the Franciscan group” (Bailey and Everhart, 1964). The Franciscan Formation includes an array of rock types occurring in no particular pattern as irregular blocks bounded by faults. Rocks of different sizes and physical characteristics are often adjacent to sheared or faulted contacts. Soils on the Guadalupe Creek banks consist of the Katkyat –Monser – Sankara Complex, which formed from eroding Franciscan formation rocks.

Numerous faults cross the area, including right-lateral strike-slip faults of the main San Andreas system. East of the San Andreas Fault zone, there is a sub-parallel belt of west-dipping high-angle reverse faults. The two major formations underlying the project area are the Jurassic-Cretaceous Franciscan Formation and the Tertiary Temblor Formation. These units are in fault contact along the Shannon Fault, a northwest-trending high angle reverse fault of probable Pliocene to Pleistocene age.

Earthquakes posing a threat to the project area could occur along the San Andreas, Berrocal, or Shannon fault zones. The San Andreas and Berrocal fault zones are located approximately 6 miles and 1 mile from the landfill, respectively. The branch of the Shannon Fault that passes through the landfill is not considered to be active within the landfill, but may be active north of the landfill. It is also believed that movement on the San Andreas Fault may result in impacts to the Shannon Fault. The Maximum Probable Earthquake (MPE) for the San Andreas Fault is estimated to be a magnitude 8.3 event, with a resulting average peak ground accelerations at the landfill calculated at 0.54g. The MPE for the Berrocal and Shannon fault zones have been estimated to be magnitude 6.9 and 6.6 events, respectively. The resulting average peak ground accelerations at the landfill, for both the Berrocal and the Shannon fault zones, have been calculated at 0.70g.

<b>VI. GEOLOGY AND SOILS - - Would the project:</b>					
<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					

<sup>1</sup> Composed of fragments of pre-existing rocks.  
Initial Study

<b>VI. GEOLOGY AND SOILS - - Would the project:</b>					
<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
1) Rupture of a known earthquake fault, as described on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
2) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
3) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
4) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**FINDINGS:**

The project site is not in an Alquist-Priolo Fault Zone, and thus not subject to rupture of a known earthquake fault.

There are numerous active faults in the region and there is a high potential for groundshaking at the project site. Groundshaking is a general term referring to all aspects of motion of the earth's surface resulting from an earthquake, and is normally the major cause of damage in seismic events. The extent of groundshaking is caused by the magnitude and intensity of the earthquake, distance from the epicenter, and local geologic conditions. The Modified Mercalli Scale (MMI), composed of 12 increasing levels of intensity that range from imperceptible shaking to catastrophic destruction, is designated by Roman numerals. On the Association of Bay Area Governments (ABAG) GIS Earthquake Shaking Scenarios Map, the project site is designated as MMI VI, which corresponds to earthquakes felt by all that cause fright, furniture to move and slight damage. The project is a creek bank stabilization project and would not include construction of any structures or edifices for human occupation. Thus, the impacts of groundshaking on the project site would be similar to existing conditions after project completion.

Soil liquefaction results from loss of strength during cyclic loading, such as imposed by earthquakes. Soils most susceptible to liquefaction include loose to medium dense, saturated sands, silty sands, sandy silts, non-plastic silts and gravels with poor drainage, or those capped by or containing seams of impermeable sediment. According to ABAG GIS maps, the liquefaction susceptibility of the project site is moderate to high, and the project site is in a Liquefaction Zone. A Liquefaction Zone is an area where historical occurrence of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(C) would be required. The City of San Jose normally requires a soils report to be prepared and submitted to the City Geologist for projects in a Liquefaction Zone; however, the proposed project is

exempt from this requirement because no structures or paved areas are proposed. Furthermore, the proposed creek bank stabilization project would decrease the potential for ground displacement by decreasing steepness of slope grades and revegetating the graded slopes. Therefore, no mitigation is required.

The project site is surrounded by hilly terrain subject to landslides. According to ABAG GIS maps, the project area is classified as Mostly Landslides, and the project site is immediately adjacent to a debris-flow source area and a Landslide Zone. A Landslide Zone is an area where previous occurrence of landslide movement, or local topographic, geological, geotechnical and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(C) would be required. The proposed project would not include any structures or edifices for human habitation, and would decrease erosion and sedimentation of creek banks along Guadalupe Creek. Therefore, no soils report or mitigation is required.

Implementation of the proposed project would include grading, excavation and vegetation removal that could result in short-term soil erosion during the construction period. Exposed soils are considered erodible when subjected to concentrated surface flow or wind. GRDF must obtain a grading permit before commencement of excavation and grading activities. Implementation of standard grading and BMPs would prevent substantial erosion and siltation during grading and excavation activities. The project would employ BMPs including silt fencing, fiber rolls, erosion control blankets and other measures to control erosion during construction and until revegetated areas are established (see Section IX. Hydrology and Water Quality, Standard Project Conditions). Adherence to BAAQMD dust control measures would further control erosion during construction (see Section III. Air Quality, Standard Project Conditions).

Expansion and contraction of volume can occur when expansive soils undergo alternating cycles of wetting (swelling) and drying (shrinking). During these cycles, the volume of the soil changes markedly. Expansive soils are common throughout California and can cause damage to foundations and slabs unless properly treated during construction. Soils at the project site are potentially expansive, but no buildings and structures are proposed. Thus, there are no impacts related to expansive soils.

No septic systems are proposed.

#### MITIGATION MEASURES:

None required.

## VII. GREENHOUSE GAS EMISSIONS

#### BACKGROUND:

Gases that trap heat in the atmosphere and affect regulation of the Earth's temperature are known as greenhouse gases (GHG). Common GHG include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), and sulfur hexafluoride (SF<sub>6</sub>).

GHG emissions from human activities contribute to overall GHG concentrations in the atmosphere and climate scientists have become increasingly concerned about the effects of these emissions on global climate change. Human (anthropogenic) production of GHGs has increased steadily since pre-industrial times and atmospheric CO<sub>2</sub> concentrations have increased from a pre-industrial value of 280 ppm to 387 ppm in 2010 (NOAA, 2010). The United Nations' International Panel on Climate Change (IPCC) fourth assessment report (AR4) concluded that recent regional climate changes, particularly temperature increases, are affecting many natural systems including water, ecosystems, food, coasts, and health (IPCC, 2007a). The AR4 concluded that most of the observed increase in global average temperature since the mid-20th century is very likely due to the observed increase in anthropogenic GHG concentrations (IPCC, 2007b).

GHGs can remain in the atmosphere long after they are emitted. The potential for a GHG to absorb and trap heat in the atmosphere is considered its global warming potential (GWP). The reference gas for measuring GWP is CO<sub>2</sub>, which



has a GWP of one. By comparison, CH<sub>4</sub> has a GWP of 21, which means that one molecule of CH<sub>4</sub> has 21 times the effect on global warming as one molecule of CO<sub>2</sub>. Multiplying the estimated emissions for non-CO<sub>2</sub> GHGs by their GWP determines their carbon dioxide equivalent (CO<sub>2</sub>e), which enables a project's combined global warming potential to be expressed in terms of mass CO<sub>2</sub> emissions. Table 5 below presents the GWPs of the common GHGs.

**Table 5. GHG Global Warming Potentials (100-Year Time Horizon)**

Compound	Global Warming Potential Relative to CO <sub>2</sub> (GWP)
Carbon Dioxide (CO <sub>2</sub> )	1
Methane (CH <sub>4</sub> )	21
Nitrous Oxide (N <sub>2</sub> O)	310
Hydrofluorocarbons (HFCs)	
HFC-23	11,700
HFC-134a	1,300
HFC-152a	140
HCFC-22	1,700
Sulfur Hexafluoride (SF <sub>6</sub> )	23,900

Source: ARB, 2009.

#### REGULATORY SETTING:

In 2006, the California State Legislature adopted the California *Global Warming Solutions Act of 2006*, Assembly Bill (AB) 32, which required the California Air Resources Board (ARB) to: 1) determine 1990 statewide GHG emissions, 2) approve a 2020 statewide GHG limit that is equal to the 1990 emissions level, 3) adopt a mandatory GHG reporting rule for significant GHG emission sources, 4) adopt a Scoping Plan to achieve the 2020 statewide GHG emissions limit, and 5) adopt regulations to achieve the maximum technologically feasible and cost-effective reductions.

In 2007, the ARB approved a statewide 1990 emissions level and corresponding 2020 GHG emissions limit of 427 million metric tons of carbon dioxide equivalents (MMTCO<sub>2</sub>e) (ARB 2007). In 2008, the ARB published its *Climate Change Scoping Plan*, which projects, absent regulation or under a “business as usual” (BAU) scenario, 2020 statewide GHG emissions levels of 596 million MTCO<sub>2</sub>e and identifies the numerous measures (i.e., mandatory rules and regulations and voluntary measures) that will achieve at least 169 MMTCO<sub>2</sub>e of reductions and reduce statewide GHG emissions to 1990 levels by 2020 (ARB 2009). Also in 2007, the ARB adopted its Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (Title 17, CCR, Section 95100 – 95133 (17 CCR §95100 – 95133)), which requires facilities that emit greater than or equal to 25,000 metric tons of CO<sub>2</sub> annually to report their GHG emissions to the ARB.

Regionally, the BAAQMD has also adopted regulations and guidelines to track and reduce GHG emissions from stationary sources. In 2005, the BAAQMD established its Climate Protection Program to reduce pollutants that contribute to the global climate change. In 2008, the BAAQMD adopted a GHG fee of 4.4 cents per metric ton of GHG emissions that applies to permitted industrial facilities and businesses. In 2010, the BAAQMD released an updated inventory of Bay Area GHG emissions for base year 2007. The Bay Area emitted 95.8 MMTCO<sub>2</sub>e in 2007, with Santa Clara County contributing 18.8 MMTCO<sub>2</sub>e to this total (BAAQMD 2010c).

The BAAQMD's *CEQA Air Quality Guidelines* contain guidance for lead agencies to assess and mitigate GHG emissions impacts. The BAAQMD has not adopted a threshold of significance for construction-related GHG emissions, but the BAAQMD does encourage lead agencies to quantify and disclose construction-related GHG emissions, determine the significance of these emissions, and incorporate best management practices to reduce construction-related GHG emissions.

The BAAQMD maintains a CEQA GHG threshold of significance for land use projects such as residential developments of 1,100 metric tons of carbon dioxide equivalents (MTCO<sub>2</sub>e) or 4.6 MT CO<sub>2</sub>e per service population per year (BAAQMD 2011). The BAAQMD defines service population to be the total number of residents and employees that the project would serve. The BAAQMD considers projects that exceed the BAAQMD's CEQA thresholds to have a significant air quality effect.

The BAAQMD's *CEQA Air Quality Guidelines* also contain screening criteria to provide lead agencies with a conservative indication of whether a proposed project could result in potentially significant air quality impacts. Consistent with the BAAQMD's guidance, if a project meets all of the screening criteria then the project would result in a less than significant air quality impact and a detailed air quality assessment is not required for the project. The operational GHG screening criteria for a "city park" land use (see Section III, Air Quality) is 600 acres. The proposed project is well under that size for both construction and operation, therefore a detailed GHG emission assessment is not necessary.

In addition, the City of San Jose adopted its Green Vision in 2007. The City's Green Vision is a fifteen year plan with goals for economic growth, environmental sustainability, and enhanced quality of life. Chapter 17.84 of the San Jose Code of Ordinances contains the City's green building regulations that support the City's Green Vision. The regulations apply to the design, construction and maintenance of buildings and are not relevant to the proposed Guadalupe Creek bank stabilization project.

<b>VIII. GREENHOUSE GAS EMISSIONS--Would the project:</b>					
<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5, 7, 8, 9, 10

#### FINDINGS:

The proposed project would produce GHG emissions from construction, however, these emissions would not exceed applicable BAAQMD significance thresholds and would therefore not have a significant impact on the environment.

As described in Section III: Air Quality, the proposed project is below the BAAQMD's "city park" land use criteria air pollutant construction screening level size of 67 acres. The BAAQMD, however, encourages lead agencies to quantify and disclose construction-related GHG emissions. As estimated using URBEMIS2007 V 9.2.4, project construction could emit approximately 337 metric tons of carbon dioxide (MTCO<sub>2</sub>) over an approximately five month construction period; emissions of CH<sub>4</sub> and N<sub>2</sub>O from construction-related fuel combustion would be negligible. The BAAQMD has not adopted a GHG significance threshold for construction activities but as reference the project's construction-related GHG emissions (337 MTCO<sub>2</sub>) would not exceed the BAAQMD's GHG significance thresholds for land use projects of 1,100 MTCO<sub>2</sub>e per year and are therefore considered less than significant.

The proposed project is for creek bank stabilization and would not include any structures and or generate vehicle trips after construction. Therefore, the proposed project would not generate GHG emissions over the long-term. The proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. GHG emissions from off-road equipment and transportation are identified and planned for in the BAAQMD's 2010 Clean Air Plan as well as the BAAQMD's Source Inventory of Bay Area Greenhouse Gas

Emissions (BAAQMD 2010a and 2010b). A primary objective of the 2010 Clean Air Plan is to reduce greenhouse gas emissions to 1990 levels by 2020 and 40% below 1990 levels by 2035. The 2010 Clean Air Plan considers an increase in off-road and transportation GHG emissions and identifies control measures designed to achieve regional GHG reduction goals.

#### MITIGATION MEASURES:

None required.

### **VIII. HAZARDS AND HAZARDOUS MATERIALS**

The project site was formerly part of the Guadalupe Mercury Mines, and there is a potential for mercury contamination of the soils at the project site. Although a naturally-occurring element, mercury in the environment is a concern for both people and wildlife because exposure can result in many lethal and sublethal effects. High mercury levels can harm the human nervous system, including brain damage and tremors. Depending on its state, mercury can harm lungs, kidneys, mouth/throat/nasal tissues, can cause vomiting, rashes, and can cause birth defects. Children are especially susceptible to the harmful effects of mercury. People can be exposed to metallic mercury vapors from breathing contaminated air around hazardous sites although most outdoor air is not likely to contain levels that would be harmful. Exposure to mercury compounds at contaminated sites is much more likely to occur from handling or ingesting contaminated soil or drinking contaminated well-water waters near those sites. Mercury can also cause harm to water quality and wildlife by entering waterways, resulting in bioaccumulation as it moves up the food chain (U.S. EPA, 2010).

Serpentine soils, present in the project area, can contain naturally occurring asbestos (NOA). NOA is a known carcinogen regulated by state and federal agencies and can be a hazardous air pollutant. Asbestos is a term used for several types of naturally-occurring fibrous minerals found in many parts of California. The most common type of asbestos is chrysotile, but other types are also found in California. When rock containing asbestos is broken or crushed, asbestos fibers may be released and become airborne. Exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest and abdominal cavity), and asbestosis (a non-cancerous lung disease which causes scarring of the lungs). Sources of asbestos emissions include: unpaved roads or driveways surfaced with ultramafic rock, construction activities in ultramafic rock deposits, or rock quarrying activities where ultramafic rock is present (U.S. EPA, 2010b). While the 411-acre property contains serpentine soil, the areas subject to this bank stabilization project do not contain widespread serpentine soil, as determined in the field by examining the soil and the vegetation.

Although the project site is not included on any government list of hazardous materials sites, the nearby Guadalupe disposal facilities and Almaden Quicksilver County Park are. The Guadalupe Landfill is currently included on the State Department of Toxic Substance Control's (DTSC) Hazardous Waste and Substances Site List (Cortese List) for past incidences of leaking underground fuel tanks. These past cases involved diesel, waste/motor oil, or hydraulic lubricating fluid soil contamination. However, clean up has been completed on these cases and the cases are now closed. The landfill remains under an open site assessment as of 8/28/2008 with the Regional Water Quality Control Board for violations of the landfill's Waste Discharge Requirements Order No. 01-050. The Almaden Quicksilver County Park is included on the list of hazardous waste sites ("Cortese" List) compiled by the Department of Toxic Substances Control pursuant to Government Code Section 65962.5 (Cal EPA, 2008) as a result of residual calcine deposits from mercury mining at the Almaden Mercury Mine. The park is currently being remediated.

According to ABAG GIS maps, the project site is located at the urban wildland interface in an area that varies from little or no fire threat to high fire threat. There was large wildfire to the south of the project area sometime between 1950 and 2007. The GRDF operates under a permit from the City's Fire Department, and is inspected on a regular basis.

<b>VIII. HAZARDS AND HAZARDOUS MATERIALS - - Would the project:</b>					
<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14, 30, 31
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

**FINDINGS:**

The proposed project would not involve the any transport, use or disposal of hazardous materials over the long-term. However, construction activities would include the limited use of ordinary equipment fuels and fluids. In the unlikely event of a spill, fuels would be controlled and disposed of in accordance with county and state regulations (see Standard Project Conditions below).

The project site is not within ¼ mile of an existing school. The closest schools are SJUSD Castellero Middle at 6384 Leyland Park Drive, San Jose (approximately 1.5 mile northeast of the project site) and Los Gatos Christian (Venture Christian Church) at 16845 Hicks Road, Los Gatos (approximately 1 mile north of the project site).

The project site is not on a government list of hazardous materials sites, and nearby government listed sites including the Guadalupe Landfill facilities and Almaden Quicksilver Park would not impact the project. However, the project site was formerly part of Guadalupe Mercury Mines and soils on the project site could be contaminated with mercury. The City of San Jose normally requires a Phase I Environmental Site Assessment to be prepared for projects on sites

where the historic land use involved the use of hazardous materials. The proposed project is exempted from this requirement because no structures or paved areas are proposed.

If soils on the project site are contaminated with mercury or contain naturally occurring asbestos (NOA), such materials could become airborne during grading and excavation activities. Airborne dust containing mercury or NOA could pose a health hazard to workers. Grading and excavation activities could also temporarily increase the amount of sediment entering Guadalupe Creek, potentially resulting in increased mercury contamination of the creek.

Implementation of BAAQMD's standard dust control measures (Section III. Air Quality) would reduce health risks to workers. Implementation of Mitigation Measure HAZ-1.1 would further reduce impacts to human health to a less than significant level. Proposed use of erosion and sedimentation control devices and stock piling of soils at staging areas distant from the creek would reduce risks to water quality and aquatic wildlife to a less than significant level.

The project site is not within an airport land use plan, within two miles of a public use airport, or within the vicinity of a private airstrip. The closest airport to the project site is the San Jose International Airport, approximately 6 miles to the north.

The proposed project would stabilize Guadalupe Creek banks and would not impair implementation of an emergency response plan.

Although the project site is an area subject to wildland fire threat, the proposed project is for creek bank stabilization and would not include any structures or buildings for human occupation. Risks associated with wildland fires would be similar to existing conditions after project completion.

#### STANDARD PROJECT CONDITIONS:

Project construction plans shall include emergency procedures for handling hazardous materials releases for materials that would be brought onto the site as part of construction activities. The following specifications shall be included in the project construction plans to address the potential release of hazardous materials:

- Emergency procedures shall be listed to include specific measures to be implemented in the event of the release of a hazardous material into water or onto land.
- The contractor shall be required to have on hand at all times adequate absorbent materials and containment booms to handle a spill equivalent to the largest container of fuels or oil in their possession.
- Measures to contain wastewater (rinsate) generated from the cleaning of equipment shall be included. Rinsate shall not be allowed to be discharged into the ground or to Guadalupe Creek but must be contained and disposed of at an off-site location as designated in the plans.

#### MITIGATION MEASURES:

If soils on the project site are contaminated with mercury or contain naturally occurring asbestos (NOA), such materials could become airborne during grading and excavation activities. Airborne dust containing mercury or NOA could pose a health hazard to workers. Grading and excavation activities could also temporarily increase the amount of sediment entering Guadalupe Creek, potentially resulting in increased mercury contamination of the creek.

*Impact HAZ-1:* Release of mercury or naturally-occurring asbestos during grading in areas containing serpentine rock, potentially affecting Guadalupe Creek or site workers. **(Less than Significant Impact with Mitigation Incorporated).**

*Mitigation Measures:* Implementation of the following mitigation measures will reduce impacts of hazards to a less than significant level.

*MM HAZ-1.1:* Excavation and grading shall avoid serpentine when feasible. If serpentine must be graded, the top 2 feet of soil shall be replaced with clean soil, so as to avoid impacts from naturally occurring asbestos (NOA). Soils potentially contaminated with mercury or containing NOA shall be removed and disposed of at an appropriate facility, to the satisfaction of the Director of Public Works. Dust shall be suppressed during grading, and a dust control plan to minimize exposure to mercury and NOA (per the Bay Area Air Quality Management District regulations) shall be submitted to the Environmental Services Department.

*MM HAZ-1.2:* A worker safety and health program, as required by Cal OSHA will be implemented during soil removal, transport, and consolidation. The worker safety and health program will:

- Minimize human contact with contaminated soils, inhalation of dust, and contact with ground or surface water.
- Inform Guadalupe Landfill employees and visitors of the relevant aspects of the safety and health program.
- Require the responsible contractor to monitor and enforce compliance.
- Require visitors and other non-essential personnel to stay a distance adequate to ensure their safety. The site will be open only to workers and individuals required to undertake or inspect work.

## **IX. HYDROLOGY AND WATER QUALITY**

### **REGULATORY SETING:**

The California State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs) have the authority in California to protect and enhance water quality, both through their designation as the lead agencies in implementing the Section 319 non-point source program of the Federal Clean Water Act and from the State's primary water-pollution control legislation, the Porter-Cologne Act. The San Francisco Bay RWQCB Region 2 office guides and regulates water quality in streams and aquifers within portions of the nine counties surrounding the San Francisco Bay through designation of beneficial uses, establishment of water-quality objectives, administration of the National Pollution Discharge Elimination System (NPDES) permit program for stormwater and construction site runoff, and Section 401 water-quality certification where development results in fill of jurisdictional wetlands or waters of the U.S.

The 1987 amendments to the Clean Water Act [Section 402(p)] provided for U.S. Environmental Protection Agency (U.S. EPA) regulation of several new categories of non-point pollution sources within the existing NPDES program. Phase I of the stormwater runoff program relied on NPDES permit coverage to address urban runoff discharges from "medium" to "large" municipal separate storm systems (MS4s) located in cities or counties with populations of 100,000 or more, from plants in industries recognized by the U.S. EPA as being likely sources of stormwater pollutants, and from construction activities that disturb more than five acres. The U.S. EPA has delegated management of California's NPDES permit program to the SWRCB and the RWQCB. The Phase II Final Rule, which took effect on March 10, 2003, extended permit coverage to certain regulated "small" MS4s and construction sites that disturb one or more acres, including smaller sites that are part of a larger common plan of development or sale.

For those projects that result in the disturbance of more than one acre of land during construction, the applicants of those projects are required to apply for coverage under the NPDES Construction Activities general permit by submitting a Notice of Intent to the State Board. Administration of these permits has not been delegated to cities, counties, or the RWQCBs but remains with the SWRCB. Since the project is larger than one acre (including access roads), it would also require a Storm Water Pollution Prevention Plan (SWPPP).

Under federal Clean Water Act Section 401 every applicant for a federal permit or license for any activity which may result in a discharge to a water body must obtain State Water Quality Certification that the proposed activity will comply with state water quality standards. The proposed project requires a Clean Water Act Section 401 Water Quality Certification because grading and excavation activities could result in discharges to Guadalupe Creek.



**SITE HYDROLOGY AND WATER QUALITY:**

The project site is in the Guadalupe River Watershed, one of the largest watersheds in the Santa Clara Valley. Guadalupe Creek collects water from the west side of the 3486-ft.-tall Mt. Umunhum in the south. From these slopes and other northern slopes of the Santa Cruz Mountains, runoff of ridgeline drainages flows downhill into Guadalupe Creek. Guadalupe Creek flows into Guadalupe River, which drains into the San Francisco Bay (SCVWD, 2011).

Guadalupe Creek and the entire Guadalupe River are listed on the Clean Water Act Section 303(d) List of Impaired Waters for mercury contamination (California Water Quality Control Board, 2007).

<b>IX. HYDROLOGY AND WATER QUALITY - - Would the project:</b>					
<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27, 28
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
j) Be subject to inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

## FINDINGS:

The proposed Guadalupe Creek bank stabilization project would improve water quality after completion by reducing the amount of sediment entering Guadalupe Creek from creek bank erosion. However, grading and excavation activities during the construction phase could temporarily increase the amount of sediment entering Guadalupe Creek, resulting in impacts to downstream water quality. In addition, construction of the proposed project may include the use of hazardous materials such as construction fuels and fluids that are potentially harmful to aquatic life and water quality. Accidents or improper use of the materials could release these materials into the environment. Implementation of the standard project conditions for water quality protection (listed below) and spill clean-up (listed under Section VIII Hazards and Hazardous Materials, Standard Project Conditions) would reduce potential water quality impacts to a less than significant level. The project would not otherwise substantially degrade water quality.

The proposed project would not include groundwater withdrawals and thus would not deplete ground water supplies. The proposed project would not increase impervious surface area; therefore, the project would not interfere with groundwater recharge.

The proposed project would not alter the course of Guadalupe Creek, or any other stream or river. The proposed project would result in minor alterations to the drainage pattern of the five eroding areas along Guadalupe Creek, such as the diversion of concentrated runoff at Area 2 to Pond D, in order to reduce the amount of sediment entering Guadalupe Creek. Thus, over the long-term, the proposed project would reduce erosion and siltation on-site through bank stabilization of the eroding areas along Guadalupe Creek. Standard project conditions for erosion control and water quality protection (listed below) would minimize erosion and siltation related to minor alterations of the drainage pattern during construction.

The proposed project would not result in an increase in impervious surface area; therefore, the amount of storm water runoff in the project area would be similar to existing conditions after project completion. Thus, the proposed project would not cause flooding on- or off-site, or create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems.

According to ABAG GIS Hazard Maps, Guadalupe Creek is within the FEMA 100-Year Floodplain in Zone A (ABAG, 2011). The project site is also within the dam failure inundation area for two dams. However, the proposed project would not include any housing or structures, and therefore would not cause any impacts related to flooding or dam failure.

A seiche is a long wavelength, large-scale wave action set up in a closed body or reservoir. The closest large closed body of water is the Guadalupe Reservoir, approximately 1 ¼ miles to the south; therefore the project site is unlikely to be inundated by a seiche. Tsunamis are long period water waves caused by underwater seismic events, volcanic eruptions, or undersea landslides. The project site is distant from the ocean and would not be subject to a tsunami. The hilly terrain surrounding the project site could be subject to mudflows, but these are unlikely to reach Guadalupe Creek.

## STANDARD PROJECT CONDITIONS:

Implementation of the following measures, consistent with NPDES Permit and City Policy requirements, will reduce potential construction impacts to surface water quality to less than significant levels:

- Prior to the commencement of any clearing, grading or excavation which disturbs an area greater than one acre, the project shall comply with the State Water Resources Control Board's National Pollutant Discharge Elimination System (NPDES) General Construction Activities Permit to the satisfaction of the Director of Public Works, as follows:

GRDC will follow best management practices (BMPs) contained in the Work Plan for Stormwater Best Management Practices (Stantec Consulting Corporation, 2009) and the existing GRDF Stormwater Pollution

Prevention Plan (SWPPP) to protect water quality, prevent erosion and sedimentation, and maximize habitat value in revegetated areas. BMPs to protect water quality and prevent erosion shall include, but not be limited to, the following measures:

- Work shall occur during the dry season from April 15th to October 15th.
  - Existing on-site vegetation shall be preserved to the extent feasible.
  - Silt fencing, erosion control blankets and fiber rolls shall be used to prevent erosion during construction and after construction until vegetation becomes established.
  - Slopes shall be revegetated with a native seed mix after completion of grading and excavation activities.
  - Established access points shall be used whenever possible, and if not possible, access points shall be restored to as natural and stable condition as possible after project completion.
  - Debris such as trash and human-caused debris shall be removed regularly from Guadalupe Creek and creekbanks.
  - Run-off from stockpiled soils shall not be allowed to flow back into the creek.
  - No equipment fueling or servicing shall take place on the project site outside of the equipment staging area shown on Figure 3 of the Biological Study.
  - A spill prevention and response plan shall be developed and all workers shall be informed of the importance of preventing spills and of the appropriate measures to take, should a spill occur.
- Prior to the issuance of a Planned Development Permit, the applicant must provide details of specific Best Management Practices (BMPs), including, but not limited to, silt fencing, erosion control blankets, fiber rolls and revegetation to the satisfaction of the Director of Planning, Building and Code Enforcement.
  - The project shall comply with the City of San Jose Grading Ordinance, including erosion and dust control during site preparation.

#### MITIGATION MEASURES:

None required.

## **X. LAND USE AND PLANNING**

The 411-acre GRDF property is located on Guadalupe Mines Road at the base of the Santa Cruz Mountains. The property straddles the Capitancillos Ridge, and is adjacent to Almaden Quicksilver County Park. Approximately 150 acres of the eastern and central portions of the GRDF property are occupied by the landfill, recycling facilities, and a maintenance facility; the remaining acreage is primarily open space. The project site is located along Guadalupe Creek, which constitutes the southern border of the GRDF property. The project site was formerly part of the Guadalupe Mercury Mines and is currently open space. Surrounding land uses include residential development to the north, rural residential development to the south and west, and open space to the south, west and east.

The San Jose General Plan 2020 Land Use designation for the project site is Non-urban Hillside (City of San Jose, 1994). The Non-urban Hillside designation applies to most hillside areas above the fifteen percent slope line. Because of the pervasive geologic conditions in the hills (landsliding, soilcreep, earthquake faults) and the extraordinary public costs of hillside development, uses must be limited to those having very little physical impact on the land and requiring no urban facilities or services. Protecting natural habitats and minimizing the visibility of development are important to enhance the open space character of these land areas. Very low intensity uses, such as grazing, tree farming, or very large lot residential estates, are potential uses under this category. The City of San Jose is in the process of updating its General Plan, and the Non-urban Hillside designation in the existing General Plan corresponds to the Open Hillside designation in the Envision San Jose 2040 Draft General Plan (City of San Jose 2011b).

The Municipal Code zoning designation for the project site is A(PD), or Agricultural District (Planned Development, City of San Jose, 2011). The purpose of the A Agricultural District is to provide for areas where agricultural uses are

desirable. However, in any district where a Planned Development Permit has been implemented, the provisions of the Permit prevail over the regulations of the base district (i.e., Agriculture).

<b>X. LAND USE AND PLANNING - - Would the activity:</b>					
<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22, 23, 24
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	26

#### FINDINGS:

Projects that have the potential to physically divide an established community include new freeways and highways, major arterials streets, and railroad lines. The proposed project is for creek bank stabilization and would not physically divide an established community.

The land use plans and regulations applicable to the project include the San Jose General Plan 2020 and the San Jose Municipal Code. The proposed project is consistent with the General Plan land use designation and the Municipal Code zoning designation. The project is also consistent with the General Plan policies and Municipal Code regulations with incorporation of standard project conditions and mitigation measures contained in this document.

The proposed project is not within the Santa Clara Valley Habitat Conservation Plan area, and would not conflict with the Three Creeks Habitat Conservation Plan, once it's adopted (see Section IV. Biology).

#### MITIGATION MEASURES:

None Required.

#### XI. MINERAL RESOURCES

Extractive resources known to exist in and near the Santa Clara Valley include cement, sand, gravel, crushed rock, clay, and limestone. Santa Clara County has also supplied a significant portion of the nation's mercury over the past century. Pursuant to the mandate of the Surface Mining and Reclamation Act of 1975 (SMARA), the State Mining and Geology Board has designated: the Communications Hill Area (Sector EE), bounded generally by the Southern Pacific Railroad, Curtner Avenue, State Route 87, and Hillsdale Avenue, as containing mineral deposits which are of regional significance as a source of construction aggregate materials (City of San Jose, 1994). Neither the State Geologist nor the State Mining and Geology Board has classified any other areas in San José as containing mineral deposits which are either of statewide significance or the significance of which requires further evaluation. Therefore, other than the Communications Hill area cited above, San José does not have mineral deposits subject to SMARA.

The project site was part of the historic Guadalupe Mines, an active mercury mine from the early 1850s to the early 1960s. Guadalupe Mines is not considered to be a mineral resource important to the region or state, or locally important, under SMARA, the San Jose General Plan, or any other regulation, plan or policy.

**XI. MINERAL RESOURCES - - Would the activity:**

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2, 22
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2, 22

**FINDINGS:**

The project site is outside of the Communications Hill area, and would not include any structures, buildings or infrastructure. Therefore, it would not result in a significant impact from the loss of availability of a known mineral resource.

**MITIGATION MEASURES:**

None Required.

**XII. NOISE**

Noise is generally defined as unwanted sound. Sound levels are usually measured and reported in decibels (dB), a unit which describes the amplitude, or extent, of the air pressure changes which produce sound. The “Day-Night Level” or DNL noise metric is the 24-hour weighted average sound level, with a 10 dB “penalty” added to levels between 10:00 pm and 7:00 am to increase their weighting in the average and to reflect greater noise sensitivity for residential land use during the night. The San Jose 2020 General Plan states that the City’s acceptable exterior noise level is 55 DNL long term, and 60 DNL short term (City of San Jose, 1994). The acceptable interior noise level is 45 DNL. Existing noise sources in the project area include vehicle traffic and operation of the Guadalupe Landfill. There are no residences, schools or other sensitive receptors near the project site.

**XII. NOISE - - Would the activity result in:**

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
a) Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22
b) Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

**XII. NOISE - - Would the activity result in:**

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**FINDINGS:**

Construction noise will result from grading and excavation activities for creek bank stabilization. Pile driving is not proposed. Noise impacts resulting from construction depend on: 1) the noise generated by various pieces of construction equipment; 2) the timing and duration of noise generating activities; 3) the distance between construction noise sources and noise sensitive receptors; and 4) existing ambient noise levels.

Typical hourly average construction noise levels are 75 to 80 dBA measured at a distance of 100 feet from the site during busy construction periods. Such noise levels would be intermittently audible to people within 1,000 feet of the construction site; thus staff and visitors at the Guadalupe Landfill and park users at the nearby Almaden Quicksilver County Park will likely hear the construction activities. Although these activities could result in infrequent periods of high noise; this noise would not be sustained and would occur only during the temporary construction period. Adherence to standard noise reducing measures would prevent any potentially significant impacts (see Standard Project Conditions below).

There will be no permanent increase in noise, and the project site is not in the vicinity of a public airport or private airstrip.

**STANDARD PROJECT CONDITIONS:**

- All internal combustion engines used on the project site shall be equipped with adequate mufflers and shall be in good mechanical condition to minimize noise created by faulty or poor maintained engines or other components.
- Locate stationary noise generating equipment as far as possible from sensitive receptors. Staging areas shall be located a minimum of 200 feet from noise sensitive receptors, such as residential uses.

**MITIGATION MEASURES:**

None required.



**XIII. POPULATION AND HOUSING**

The project site is at the Guadalupe Landfill; the closest housing is approximately ½ mile from the closest point of the project site.

<b>XIII. POPULATION AND HOUSING - - Would the activity:</b>					
<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**FINDINGS:**

The proposed project would provide bank stabilization at five areas along Guadalupe Creek. The project does not propose the construction of any structures for human occupation or employment or any new roads or utilities. The project would not cause growth or displace existing housing or people.

**MITIGATION MEASURES:**

None required.

**XIV. PUBLIC SERVICES**

The site is located in the City of San Jose, and is served by existing fire, police, school, park and other public facilities. The site is served by Fire Station 22 at 6461 Bose Lane, located about 2 miles from the site.

<b>XIV. PUBLIC SERVICES - - Would the project:</b>					
<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**XIV. PUBLIC SERVICES - - Would the project:**

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**FINDINGS:**

The project would stabilize the creek bank in five areas along Guadalupe Creek. The project would not increase the demand for public services. No additional fire or police personnel or equipment are necessary to serve the proposed project, and the project would not increase school enrollment or use of parks.

**MITIGATION MEASURES:**

None required.

**XV. RECREATION**

The adjacent property is the Almaden-Quicksilver Park and recreational trails located near the property boundary include portions of the Senador and Guadalupe trails.

**XV. RECREATION - - Would the project:**

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**FINDINGS:**

The proposed project is creek bank stabilization at five areas along Guadalupe Creek on the Guadalupe Landfill property. The proposed project would not increase the number of residents or employees on the site, and therefore is not expected to impact the use of existing parks or recreation centers such that deterioration would occur or be accelerated.

**MITIGATION MEASURES:**

None required.

**XVI. TRANSPORTATION / TRAFFIC**

Regional access to the project site is provided by State Route 17, State Route 85, and Interstate 101. Local access is provided by Camden Avenue connecting to Guadalupe Mines Road. There are no existing sidewalks, bike paths or public transit facilities in the project vicinity.

<b>XVI. TRANSPORTATION/TRAFFIC - - Would the project:</b>					
<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**FINDINGS:**

The project would stabilize the creek bank in five areas along Guadalupe Creek. There would be no increase in traffic after project completion. Although there would be a slight increase in traffic on local roads from construction vehicles and workers accessing the project site, this impact would be short-term and will not be substantial. The proposed project would be in conformance with the City's Transportation Level of Service Policy (Council Policy 5-3) and would not create a significant traffic impact. Therefore, the project would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, or with an applicable congestion management program.

The project would not result in a change in air traffic patterns, substantially increase hazards due to a design feature, result in inadequate emergency access, or conflict with policies and plans regarding alternative transportation.

**MITIGATION MEASURES:**

None required.

**XVII. UTILITIES AND SERVICE SYSTEMS**

The project site is part of the Guadalupe Landfill property, which is served by PG&E and municipal sewer and stormwater facilities.

<b>XVII. UTILITIES AND SERVICES SYSTEMS - - Would the activity:</b>					
<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**FINDINGS:**

The project is a creek bank stabilization project and would not create demand for water, wastewater treatment, stormwater drainage or solid waste disposal after project completion. The project would improve drainage and water quality in Guadalupe Creek by decreasing the amount of sediment entering the creek. A small amount of construction waste would be generated (i.e. excavated material), but would not exceed capacity of the Guadalupe Landfill or any other landfill. Therefore, the project would not require construction or expansion of water, wastewater, stormwater or solid waste disposal facilities or increase demand at the existing facilities that serve the project area. The project would comply with applicable regulations related to solid waste.

**MITIGATION MEASURES:**

None required.

**XVIII. MANDATORY FINDINGS OF SIGNIFICANCE**

<b>XVIII. MANDATORY FINDINGS OF SIGNIFICANCE</b>					
<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
a) Does the project have the potential to (1) degrade the quality of the environment, (2) substantially reduce the habitat of a fish or wildlife species, (3) cause a fish or wildlife population to drop below self-sustaining levels, (4) threaten to eliminate a plant or animal community, (5) reduce the number or restrict the range of a rare or endangered plant or animal, or (6) eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b) Does the project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**FINDINGS:**

As discussed in the previous sections, the proposed project could potentially have significant environmental effects with respect to biological resources, cultural resources and hazardous materials. With the above noted mitigation, however, the impacts of the proposed project would be reduced to a less than significant level.

**MITIGATION MEASURES:**

No standard project conditions or mitigation measures are required for the following disciplines that would not be impacted by the project: Aesthetics, Agriculture and Forestry Resources, Geology and Soils, Greenhouse Gas Emissions, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Transportation/Traffic, and Utilities and Service Systems.

The measures for Air Quality, Biological Resources, Cultural Resources, Hazards and Hazardous Materials, Hydrology and Water Quality and Noise are described in the discussion of each of these disciplines.

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## Appendix A. Site Photos

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Area 2



Area 4





Area 6



Area 9





Area 10



Coyote brush shrubland and annual grassland in the project area



## **Appendix B. Photographs of Typical Equipment**

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Tractor with mower attachment.



2,000-gallon water truck.



10-wheel dump truck.



Cat 930 wheel loader (small model)



Cat 950 wheel loader (medium size).

**Wheel Loaders  
Integrated Toolcarriers**

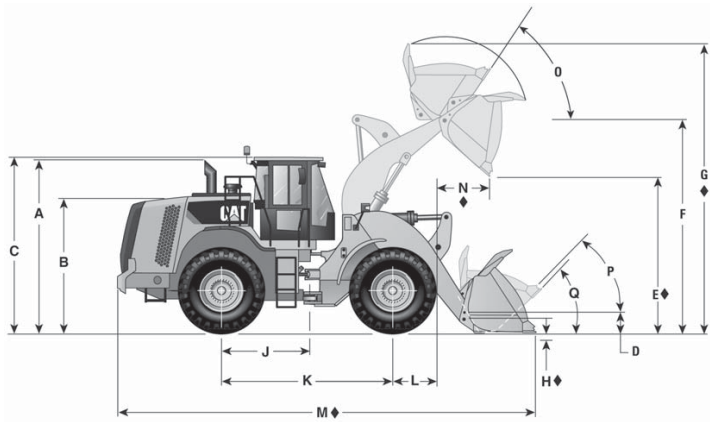
**Specifications**



MODEL	950K		962K		966K	
Flywheel Power: Net	157 kW	210 hp	165 kW	222 hp	199 kW	267 hp
Gross	173 kW	232 hp	181 kW	243 hp	222 kW	296 hp
Engine Model	C7.1 ACERT		C7.1 ACERT		C9.3 ACERT	
Rated Engine RPM	1900		1900		1800	
Bore	105 mm	4.1"	105 mm	4.1"	115 mm	4.5"
Stroke	135 mm	5.3"	135 mm	5.3"	149 mm	5.9"
No. Cylinders	6		6		6	
Displacement	7.01 L	427.8 in <sup>3</sup>	7.01 L	427.8 in <sup>3</sup>	9.3 L	568 in <sup>3</sup>
Speeds Forward	km/h	mph	km/h	mph	km/h	mph
1st	6.9	4.3	6.9	4.3	6.7	4.2
2nd	12.9	8.0	12.9	8.0	12.6	7.8
3rd	22.7	14.1	22.7	14.1	22.4	13.9
4th	37.9	23.6	37.9	23.6	37.4	23.2
Speeds Reverse						
1st	7.5	4.7	7.5	4.7	7.8	4.9
2nd	14.1	8.8	14.1	8.8	13.7	8.5
3rd	24.8	15.4	24.8	15.4	23.5	14.6
4th	39.8	24.7	39.8	24.7	38.5	23.9
Hydraulic Cycle Time, Rated Load in Bucket:	Seconds		Seconds		Seconds	
Raise	5.9		5.9		5.9	
Dump	1.8		1.8		1.5	
Lower (Empty, Float Down)	2.5		2.5		2.4	
Total	10.0		10.0		9.8	
Tread Width	2.14 m	7'0"	2.14 m	7'0"	2.23 m	7'4"
Width Over Tires	2.79 m	9'2"	2.79 m	9'2"	3.01 m	9'11"
Ground Clearance	397 mm	1'3"	397 mm	1'3"	475 mm	1'6"
Fuel Tank Capacity	314 L	83 U.S. gal	314 L	83 U.S. gal	381 L	101 U.S. gal
Hydraulic Tank Capacity	137 L	36 U.S. gal	137 L	36 U.S. gal	137 L	36 U.S. gal
Hydraulic System Capacity (includes tank)	189 L	50 U.S. gal	189 L	50 U.S. gal	200 L	52 U.S. gal

These machines are Tier 4 Interim/Stage IIIB and only available in North America and Europe. Contact your local Cat dealer for product availability.





Dimensions shown represent standard machine with bucket, bolt-on cutting edge, and standard tires.

◆ Varies with Bucket Size and/or Bucket Configuration — Refer to Performance Data.

MODEL	950K		962K	
	General Purpose Bolt-on Edges		General Purpose Bolt-on Edges	
	3.1 m <sup>3</sup>	4 yd <sup>3</sup>	3.3 m <sup>3</sup>	4.3 yd <sup>3</sup>
A Height to top of exhaust pipe	3099 mm	10'2"	3099 mm	10'2"
B Height to top of engine compartment	2415 mm	7'11"	2415 mm	7'11"
C Height to top of ROPS	3356 mm	11'0"	3356 mm	11'0"
D Hinge pin height at carry position	659 mm	26"	677 mm	27"
◆ E Dump clearance at full lift and 45° discharge angle	2876 mm	9'5"	3054 mm	10'0"
F Hinge pin height at full lift	4021 mm	13'2"	4021 mm	13'2"
◆ G Maximum overall height	5525 mm	18'2"	5788 mm	19'0"
◆ H Maximum digging depth	90 mm	3.5"	88 mm	3.5"
J Machine center point to axle	1905 mm	6'3"	2055 mm	6'7"
K Wheel base	3350 mm	10'11"	3350 mm	10'11"
L Radius of tire	746 mm	29"	746 mm	29"
◆ M Maximum overall length	8162 mm	26'10"	8482 mm	27'10"
◆ N Reach at full lift	1429 mm	4'8"	1392 mm	4'6"
O Maximum rollback at maximum lift		59°		59°
P Maximum rollback at carry height		46°		51°
Q Maximum rollback at ground		38°		39°
Ground clearance (std. tires)	397 mm	1'3"	397 mm	1'3"
Tread width (std. tires)	2.14 m	7'0"	2.14 m	7'0"
Width over tires (std. tires)	2.78 m	9'1"	2.78 m	9'1"
Tires used for measurements	L3 Michelin XHA2		L3 Michelin XHA2	

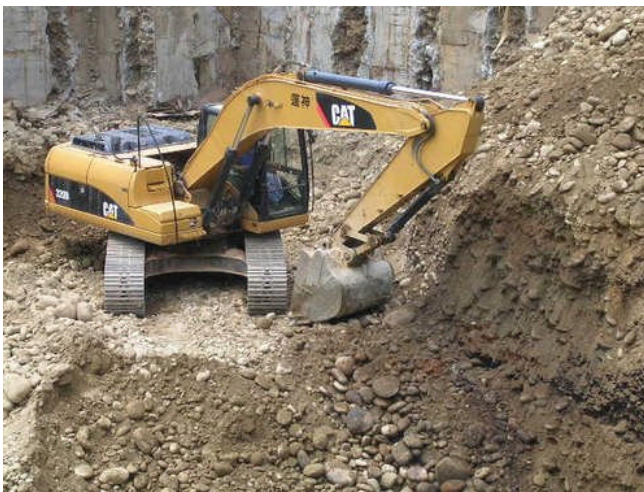
These machines are Tier 4 Interim/Stage IIIB and only available in North America and Europe. Contact your local Cat dealer for product availability.



Cat 307 Excavator (small size model)



Cat 315 Excavator (medium-small size)




Cat 320 Excavator (medium size model)


**HYDRAULIC EXCAVATORS**

Operating Weight 1650 to 316 600 kg (3640 to 698,000 lb)


**Track Models**




301.6C  
301.8C




302.5C




303C CR  
303.5C CR  
305.5




304C CR  
305C CR




307C  
307D




308D CR  
308C CR SB




311D LRR




312D  
312D L




313C CR  
313C SR




314C CR  
314C LCR




315D L




319D L  
319D LN




320D  
320D RR




320D L  
320D LRR




323D L  
323D LN




321D LCR




324D  
324D L  
324E  
324E L  
324E LN




329D  
329D L  
329E  
329E L  
329E LN




336D  
336D L  
336D LN  
336E  
340D HD WH  
336E L  
336E LN



349D  
349D L – FIX  
349D L – VG  
349E  
349E L – FIX  
349E L – VG



374D



390D


**Front Shovels**

Operating Weight 74 300 to 318 500 kg (163,803 to 702,000 lb)




385C FS


**Wheel Models**




M313D




M315D



M316D



M318D



M322D

**BACKHOE LOADERS**

Digging depth 4420 to 6528 mm (14'6" to 21'5")



416E



420E/420E IT



422E



428E



430E/430E IT



432E



442E



434E MECHANICAL  
434E PILOT  
444E

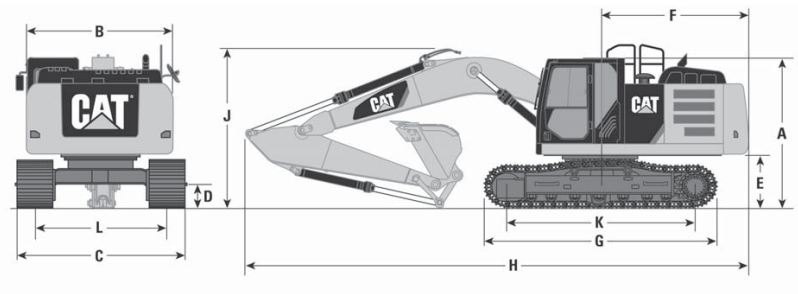


450E

Excavators

Shipping Dimensions

● 324E ● 324E L



	324E Reach**		324E Mass***		324E L Reach**		324E L Mass***		324E L Reach****		324E L Mass*****	
Region Offerings	Japan		Japan		North America		North America		Europe		Europe	
	mm	ft	mm	ft	mm	ft	mm	ft	mm	ft	mm	ft
A	2996	9'10"	2996	9'10"	2996	9'10"	2996	9'10"	2996	9'10"	2996	9'10"
B	2934	9'8"	2934	9'8"	2934	9'8"	2934	9'8"	2934	9'8"	2934	9'8"
C	3180	10'5"	3180	10'5"	3380	11'1"	3380	11'1"	3190	10'6"	3190	10'6"
D	475	1'6"	475	1'6"	471	1'7"	471	1'7"	471	1'7"	471	1'7"
E	1088	3'7"	1088	3'7"	1088	3'7"	1088	3'7"	1088	3'7"	1088	3'7"
F	2947	9'8"	2947	9'8"	2947	9'8"	2947	9'8"	2947	9'8"	2947	9'8"
G	4261	13'11"	4261	13'11"	4641	15'3"	4641	15'3"	4641	15'3"	4641	15'3"
H*	10 063	33'0"	9480	31'1"	10 063	33'0"	9480	31'1"	10 100	33'2"	9480	31'1"
J*	3221	10'7"	3500	11'6"	3221	10'7"	3500	11'6"	3410	11'2"	3500	11'6"
K	3450	11'4"	3450	11'4"	3830	12'7"	3830	12'7"	3830	12'7"	3830	12'7"
L	2390	7'10"	2390	7'10"	2590	8'6"	2590	8'6"	2590	8'6"	2590	8'6"

\*Varies with stick length.  
\*\*R2.95 (9'8") stick and 790 mm (31") shoe.  
\*\*\*M2.5 (8'2") stick and 790 mm (31") shoe.  
\*\*\*\*R2.5 (8'2") stick and 600 mm (24") shoe.  
\*\*\*\*\*M2.5 (8'2") stick and 600 mm (24") shoe.